

3.0 SCOS97-NARSTO MEASUREMENTS

The synopsis of measurements has already provided a general overview of these measurements; this section provides a more detailed description designed to focus data analysts and modelers search for data of particular interest to their question. Important features of the measurement program are the Routine Network, existing meteorological resources and supplemental measurements.

3.1 Site Descriptions

In southern California, the Routine Network forms the matrix of surface data collection for air quality and for meteorological parameters. In this domain, there are also permanent existing surface meteorological monitoring stations that do not collect air quality data, do not report their meteorological data to AIRS, and are not part of the Routine Network. The SCOS97-NARSTO primarily relied on, scrutinized QA at, and in essence, superimposed the supplemental ozone, NO_y, and aerosol networks on the matrix of the Routine Network. Each SCOS97-NARSTO network also added new stations. As defined here, supplemental stations, temporary or semi-permanent, are those whose data are not reported to AIRS. A more detailed description of the existing Routine Network and existing surface meteorological monitoring sites is provided in section 3.2 of this volume.

The supplemental ozone network included the AeroVironment stations – Calabasas, Cajon Pass West, Santa Catalina Island Airport, Santa Catalina Island Isthmus, and Palos Verdes; the ARB station - Mount Baldy Village; the Children's Health Study stations – Lompoc Cabrillo High School, Lake Arrowhead, Jurupa Valley High School [Mira Loma], Gladstone Elementary School [San Dimas], and UC Riverside Agricultural Experimental Station; the CE-CERT stations – Mount Wilson, Tehachapi Pass, San Nicolas, Atlantic Richfield Oil Company [ARCO Tower], Diamond Bar [South Coast AQMD], and Union Pacific Railroad [Chino Mira Loma]; the South Coast AQMD station– Temecula; the San Diego CAPCD stations – Black Mountain, Red Mountain, San Marcos Peak, Valley Center, Warner Springs, Camp Pendleton, Soledad Mountain, and San Clemente Island; Mojave Desert AQMD station – Cajon Pass East; Santa Barbara CAPCD station – Santa Rosa Island; the Portland State University station – UC Riverside CE-CERT Facility; and the U.S. Navy stations – Point Mugu and Laguna Peak supplemental sites. It is important to note that many of these sites were in the past part of the Routine Network and future monitoring programs may be able to take advantage of the SCOS97-NARSTO experience of operating and managing these sites. Certain of these, such as the Children's Health Study sites, continue to operate routinely. Each subset of the supplemental ozone sites will be described in section of 3.3 of this volume. Table 1 provides a list of supplemental ozone sites. The Santa Barbara CPACD operated the Santa Rosa Island site to provide data during SCOS97-NARSTO and has submitted these data to AIRS. The ARB Mount Baldy Village site also reported data to AIRS.

The supplemental NO_y network included the AeroVironment stations – Calabasas, and Cajon Pass West; the CE-CERT stations – San Nicolas Island, Diamond Bar [South

Coast AQMD], Union Pacific Railroad [Chino Mira Loma], Azusa, Banning, Los Angeles North Main, Simi Valley, and Soledad Mountain; the Mojave Desert AQMD stations – 29 Palms, and Barstow; and the San Diego CAPCD station – Alpine. Of these, Azusa, Banning, Los Angeles North Main, Simi Valley, 29 Palms, Barstow, and Alpine report some of their data to AIRS. The NO_x network will be described more fully in section 3.3 of this volume. Table 2 has a list of supplemental NO_x sites.

The ten station supplemental aerosol network included the CE-CERT stations – Mount Wilson, Azusa, Azusa North Todd, Diamond Bar, Los Angeles North Main, Union Pacific Railroad [Chino Mira Loma], and UC Riverside CE-CERT Facility; the Children's Health Study station - Jurupa Valley High School [Mira Loma]; and the UC Riverside station – Pierce Hall. Of these, Azusa and Los Angeles North Main report some of their data to AIRS. Dr. Prather [UC Riverside], Dr. Cass [Cal Tech], Dr. Hering [Aerosol Dynamics], and other aerosol groups from the Harvard School of Public Health and the Brigham Young University operated instruments at the aerosol network sites. The aerosol network will be further described in section 3.6 of this volume. The radiation network consisted of two stations – the Mount Wilson and the UC Riverside CE-CERT facility. This network and the routine radiation network are further described in section 3.6 of this volume. Table 3 has details of aerosol and radiation sites. Please note that site identification for UC Riverside Pierce Hall notes two sites, one for Professor Prather's Lab and the other for the roof of the building; both these sites were noted as the Pierce Hall in the aerosol planning documents [RIPH]. The site identification for CE-CERT facility [RICE] has also been changed to RIRD because it contradicted an earlier site identification designation within the SCOS97-NARSTO Atlas.

In the past few years, through the Photochemical Assessment Monitoring Stations (PAMS) program, and under the direction of the U.S. EPA, hydrocarbon and carbonyl speciation has been added to measurements at the Routine Network in southern California. The SCOS97-NARSTO VOC network expanded the frequency of PAMS monitoring at the Routine Network sites, added new sites, and instituted a rigorous QA program. The 23 site VOC network included the DRI stations – Mexicali [Technical University], Tijuana [Rosarito Beach], Point Conception, San Nicolas Island, Anaheim, Burbank, Santa Catalina Island Isthmus; the U.S. Marines stations – 29 Palms; the Portland State University station – UC Riverside CE-CERT Facility; the South Coast AQMD stations – Azusa, Burbank, Hawthorne, Pico Rivera; the San Diego CAPCD – Kearny Mesa [Overland], Soledad Mountain, Alpine; the UC Riverside biogenic hydrocarbon stations – Azusa, Banning, Pine Mountain, Ojai Forest, and Mount Baldy Village; and the U.S. EPA stations at Azusa. Mexicali [Technical University], Tijuana [Rosarito Beach], Point Conception, San Nicolas Island, Santa Catalina Island Isthmus Airport, Soledad Mountain, Pine Mountain, Ojai Forest, 29 Palms, and Mount Baldy stations were added to the PAMS network. Some measurement groups were collocated because DRI needed to continue the reformulated gasoline studies in the SoCAB at the same sites for 1995-97 and new automated continuous sampling at Burbank required rigorous QA through measurement intercomparison. To investigate air pollution transport from SoCAB to the Mojave Desert Air Basin, DRI also operated a halocarbon

network at Barstow and Lancaster. Hydrocarbon and carbonyl samples were collected onboard four airplane platforms – San Diego Navajo and Cessna 182, UC Davis Cessna 182, and STI Aztec. Samples were delivered to the El Monte and the Camarillo airports, and to the Montgomery Field and shipped to DRI or to Biosphere Research Corporation [CE-CERT subcontractor] for speciation and analysis. More thorough description of the VOC network is provided in section 3.3 of this volume. A VOC network site list is provided in Table 4. Please note that due to wildfires, the Pine Mountain station had to be moved.

In the past few years and through the PAMS program, EPA has also added meteorological resources aloft, specifically radar wind profilers and radio acoustic sounding systems, to the Routine Network in southern California. These include the South Coast AQMD stations – Los Angeles and Ontario airports; the Ventura CAPCD station – Simi Valley; the San Diego CAPCD stations – Point Loma and Valley Center. To these, ARB added two units early on the SCOS97-NARSTO planning process at the El Monte Airport and the Norton Air Force Base. Then, the TC significantly improved these resources by adding the NOAA [William Neff] stations – Alpine Meteorological, Goleta, Los Alamitos, Port Hueneme, Carlsbad, Palmdale, San Clemente Island Meteorological, Santa Catalina Island Meteorological, Tustin, University of Southern California Meteorological, and the Van Nuys airport; the NOAA [M.J. Post] stations – Brown Field and El Centro; the Radian-STI stations – Barstow Meteorological, Riverside H.G. Mills Water District, Temecula East Municipal Water District, Thermal Airport, and Hesperia Oak Hills Center; the U.S. Air Force stations – three sites at Vandenberg Air Force Base. To study nocturnal jets and other meteorological phenomena closer to the ground, the TC and the Meteorological WG, decided to incorporate sound detection and ranging (sodar) instruments with finer resolution (altitude increments of roughly 75 meters vs. 100 meters for profilers) closer to the ground. The seven station network included the NOAA [William Neff] stations – Los Alamitos, Azusa Meteorological, Santa Clarita, and Vandenberg Air Force Base; San Diego CAPCD station – Warner Springs Meteorological; and U.S. Marines stations – two sites at 29 Palms. Due to ground clutter, the second sodar at 29 Palms was moved to a new location inside the base [Atlas site identification 29PB moved to 29PC]. The RWP-RASS and sodar networks are listed in Tables 5 and 6.

To expand the meteorological resources aloft further and to provide opportunities for QA through platform data intercomparisons, the TC and the Meteorological WG supported more frequent rawinsondes from existing military bases and the National Weather Service sites and added new rawinsonde sites. The thirteen site network included the ARB station – Bakersfield Meteorological; the National Weather Service station – Miramar; the military bases – 29 Palms, Edwards Air Force Base, China Lake, Tustin [El Toro operations moved to Tustin], San Nicolas, Point Mugu, North Island Naval Air Station [launch station moved to Imperial Beach], and Vandenberg Air Force Base, and the CE-CERT stations at UCLA, UC Riverside CE-CERT Facility, and Pomona. Due to security concerns at Pomona, the CE-CERT did not launch midnight sondes in the last two IOP days. Meteorological parameters, particularly temperature and relative humidity data, were available from seven ozonesonde site network from the CE-CERT

stations – Anaheim, California State University at Northridge, Valley Center, Pomona, UC CE-CERT Facility, University of Southern California Hancock Building; and from the U.S. Navy station at Point Mugu. Tables 7 and 8 list the SCOS97-NARSTO sonde network.

The TC and the Air Quality WG supplemented the ozonesonde network with two ozone lidars and six instrumented airplanes. The lidars were located at El Monte Airport and at Hesperia. Airplanes were flown from the Montgomery Field – San Diego Cessna 182 and San Diego Navajo; from the El Monte airport – UC Davis Cessna 182 and Cal Tech Pelican aerosol; from the Camarillo airport - STI Aztec; and from Oxnard airport the U.S. Navy Partnavia. Table 9 and 10 provide lists of these lidar stations and airplanes.

The SCOS97-NARSTO Atlas is available from the ARB Research Division on CD-ROM and includes further description, maps, photographs, and on occasion, video of selected sites.

Table 3-1
SCOS97-NARSTO SUPPLEMENTAL OZONE SITES

ID	Name	Address	City	Site No.	(mst)	DD	MM	SS	DD	MM	SS	Height	County	Air Basin	
CAJB	Cajon Pass-AVES	Between 9785 & 9826 Farmington	Cajon	AIRS	1298	34	22	31	117	26	52	5 m	San Bernardino	SOCAB	
CALB	Calabasas-AVES	Back of Lot on 4241 Balcony Drive	Calabasas		183	34	8	52	118	36	43	5 m	Los Angeles	SOCAB	
CATA	Santa Catalina Airport-AVES	6 miles North West of Avalon	Avalon		488	33	24	17	118	24	57	-	Los Angeles	SOCAB	
CATT	Santa Catalina Isthmus-AVES	USC Research Station Near Isthmus	Santa Catalina Island		37	33	26	30	118	29	50	-	Los Angeles	SOCAB	
PVSP	Palos Verdes-San Pedro Hill-AVES	Reservoir 20 on the Gated Crest Road	San Pedro		442	33	44	45	118	20	15	2 m	Los Angeles	SOCAB	
MBLD	Mount Baldy Village	Mt Baldy Rd -past Hill the fork that deadends south	Azusa		1219	34	14	14	17	39	15	-	Los Angeles	SOCAB	
LOMP	Lompoc Cabrillo High School	4350 Constellation Road	Lompoc		60830006	0	34	42	39	120	28	11	-	Santa Barbara	SCCAB
CHIN	Children's Health Study Jurupa Valley HS	Bellegrave & Elizwanda (10551 Bellegrave)	Mira Loma		60650008	225	34	0	8	117	31	21	-	Riverside	SOCAB
LKAR	Lake Arrowhead	Rim-of-the-World Hwy School-27400 Hwy 18	Lake Arrowhead		60710007	1829	34	13	57	117	12	29	-	San Bernardino	SOCAB
SNDM	San Dimas	1314 Gladstone	San Dimas		60370006	34	8	15	117	50	0	-	Los Angeles	SOCAB	
UCDC	Riverside-UC Agricultural Operations	4919 Canyon Crest-Field 16L	Riverside		60650004	299	33	57	43	117	20	2	-	Riverside	SOCAB
ARCO	ARCO Plaza Tower	515 South Flower	Los Angeles		88	34	3	6	118	15	24	-	Los Angeles	SOCAB	
CHIM	Chino-Mira Loma-Union Pacific Auto Yard	4500 Elizwanda	Mira Loma		225	34	0	20	117	30	49	-	Riverside	SOCAB	
DIAM	Diamond Bar Right Side of Day Care Center	21865 East Copley Drive	Diamond Bar		60370206	300	33	59	59	117	49	56	-	Los Angeles	SOCAB
SNIC	San Nicolas Island NE Bldg 279	Coastal Road to Building 279	San Nicolas Island		14	33	16	47	119	31	11	-	Ventura	SCCAB	
TEHP	Tehachapi Pass-Monolith	Jameson Road opposite Hwy from Monolith	Monolith		60291005	1209	35	6	50	118	22	45	-	Kern	SJVAB
WILS	Mount Wilson	Close to TSU Building	Mount Wilson		1725	34	13	35	118	3	36	-	Los Angeles	SOCAB	
TCCC	Temecula	4100 County Rd, Bldg C-County Center	Temecula		6065	427	33	31	38	117	9	39	4 m	Riverside	SOCAB
BLKM	Black Mountain	9606 Laurentian Drive	Black Mountain		473	32	58	54	117	6	56	-	San Diego	SDAB	
CLMS	San Clemente Island	Across End Point on other side of the N-S Route	San Clemente Island		452	32	54	56	118	29	19	-	San Diego	SDAB	
REDM	Red Mountain-RTP Site	Fallbrook Pub Utilities Dist @ 3500 Mission Road	Fallbrook		552	33	24	2	117	11	27	-	San Diego	SDAB	
SMPK	San Marcos Peak	Deer Springs to WindSong up to the top	Deer Springs		549	33	11	6	117	7	48	5 m	San Diego	SDAB	
PEND	Camp Pendleton (Camp Del Mar)	Site next to 21448 Del Mar Marina	Camp Del Mar		6	33	13	2	117	23	46	3 m	San Diego	SDAB	
SOLM	Soledad Mountain	7120 Via Capri	La Jolla		251	32	50	27	117	15	0	4 m	San Diego	SDAB	
VGEN	Valley Center-RTP Site-Public Road Dept	Valley Center Rd Cole Grade Rd Gate @ right	Valley Center		366	33	13	57	117	1	28	3 m	San Diego	SDAB	
WSPR	Warner Springs - RTP Site	Hwy 79-Puerta La Cruz Road-1/2 mile to camp	Warner Springs		945	33	19	20	116	41	4	3 m	San Diego	SDAB	
CAJC	Cajon Pass-MDAQMD	Right Fork of HWY 15, gate at Elevation Sign	Cajon		1311	34	20	56	117	26	49	3 m	Bernardino	SOCAB	
ROSA	Santa Rosa Island A	Ozone Site Near Shore line	Santa Rosa Island		60832012	15	34	1	0	120	3	0	-	Santa Barbara	SCCAB
CERD	Riverside-CECERT	1200 Columbia Avenue	Riverside		285	34	0	1	117	20	10	-	Riverside	SOCAB	
LAGP	Laguna Peak	Point Mugu			444	34	6	31	119	3	55	-	Ventura	SCCAB	
PMGU	Point Mugu Naval Air Station	Building 552	Oxnard		3	34	7	16	119	7	20	-	Ventura	SCCAB	

Table 3-2

SCOS97-NARSTO NOY NETWORK

ID	Name	Address	City	Site No.	(ftmsl)	DD	MM	SS	DD	MM	SS	Height	County	Air Basin
			AIRS	Elev	Latitude	Longitude						Inlet		
CAJB	Cajon Pass-AVES	Between 9785 & 9826 Farmington	Cajon	1298	34	22	31	117	26	52	5 m	San Bernardino	SoCAB	
CALB	Calabasas-AVES	Back of Lot on 4241 Balcony Drive	Calabasas	183	34	8	52	118	36	43	5 m	Los Angeles	SoCAB	
CHIM	Chino-Mira Loma-Union Pacific Auto Yard	4500 Elwanda	Mira Loma	225	34	0	20	117	30	49	-	Riverside	SoCAB	
DIAM	Diamond Bar Right Side of Day Care Center	21865 East Copley Drive	Diamond Bar	60370206	300	33	59	117	49	56	-	Los Angeles	SoCAB	
SNIC	San Nicolas Island NE Bldg 279	Coastal Road to Building 279	San Nicolas Island	14	33	16	47	119	31	11	-	Ventura	SCCAB	
SVAL	Simi Valley-High School	5400 Cochran Street-Stowe 2nd Gate-Aux Bldg	Simi Valley	61112002	310	34	16	37	118	36	44	5 m	Ventura	SCCAB
29PM	29 Palms	6136 Adobe Road	29 Palms	60710017	604	34	8	31	116	3	18	-	San Bernardino	MDAB
BARS	Barstow	301 Mountain View	Barstow	60710001	690	34	53	41	117	1	26	5 m	San Bernardino	MDAB
AZSA	Azusa	803 North Loren Avenue	Azusa	60370002	183	34	8	9	117	55	22	-	Los Angeles	SoCAB
BANN	Banning	135 North Alessandro	Banning	60850002	640	33	56	16	116	51	30	-	Riverside	SoCAB
LANM	Los Angeles North Main	1630 North Main Street	Los Angeles	60371103	87	34	4	1	118	13	36	-	Los Angeles	SoCAB
ALPN	Alpine	2300 Victoria Drive	Alpine	60731006	603	32	50	32	116	46	6	-	San Diego	SDAB
SOLM	Soledad Mountain	7120 Via Capri	La Jolla	251	32	50	27	117	15	0	4 m	San Diego	SDAB	
UCDC	Riverside-UC Agricultural Operations	4919 Canyon Crest-Field 16L	Riverside	60650004	299	33	57	43	117	20	2	-	Riverside	SoCAB

Table 3-3
SCOS97-NARSTO AEROSOL NETWORK

ID	Name	Address	City	Site No.	(msl) DD	MM	SS	DD	MM	SS	Height	County	Air Basin	
			AIRS	Elev	Latitude						Inlet			
CHIM	Chino-Mira Loma-Union Pacific Auto Yard	4500 Elwanda	Mira Loma	225	34	0	20	117	30	49	-	Riverside	SoCAB	
CHIN	Children's Health Study Jurupa Valley HS	Bellegrave & Elwanda (10551) Bellegrave)	Mira Loma	60650008	225	34	0	8	117	31	21	-	Riverside	SoCAB
DIAM	Diamond Bar Right Side of Day Care Center	21855 East Copley Drive	Diamond Bar	60370206	300	33	59	59	117	49	56	-	Los Angeles	SoCAB
AZSA	Azusa	803 North Loren Avenue	Azusa	60370002	183	34	8	9	117	55	22	-	Los Angeles	SoCAB
LANM	Los Angeles North Main	1630 North Main Street	Los Angeles	60371103	87	34	4	1	118	13	36	-	Los Angeles	SoCAB
UCDC	Riverside-UC Agricultural Operations	4919 Canyon Crest-Field 16L	Riverside	60650004	299	33	57	43	117	20	2	-	Riverside	SoCAB
AZSP	Azusa Aerosol-Hunt & Sons Plumbing	780 North Todd Avenue	Azusa	183	34	8	10	117	56	28	-	Los Angeles	SoCAB	
RIPR	UC Riverside-Pierce Hall-Roof-UC Campus	Pierce Hall Roof	Riverside		324	33	58	26	117	19	40	-	Riverside	SoCAB
RIVC	UC Riverside-Pierce Hall-Prather Lab-Campus	Pierce Hall-Inlets @ 2nd Floor	Riverside		324	33	58	23	117	19	35	-	Riverside	SoCAB
RIRD	UC Riverside-CECERT-Roof Radiometry	1200 Columbia Avenue	Riverside	302	34	0	0	117	20	9	-	Riverside	SoCAB	
WILS	Mount Wilson Radiometry	Close to TSU Building	Mount Wilson	1725	34	13	35	118	3	36	-	Los Angeles	SoCAB	

Table 3-4
SCOS97-NARSTO VOC NETWORK

ID	Name	Address	City	Site No.	(msl) DD	MM	SS	Height	County	Air Basin
			AIRS	Elev	Latitude	Longitude		Inlet		
MEXI	Technical University-ITM-Mexicali	Across Carretera Algodones & Aven Ciudad De Monterrey	Mexicali	8000200010	32	37	10	115	23	Baja California Mexico
TIRP	Rosarito Playa (Beach)-Tijuana-E End of HS	Pedro Moreno School-3 Blks E Benito Juarez Blvd	Tijuana	800020004	15	32	21	1117	3	Baja, Mexico
SNIC	San Nicolas Island NE Bldg 279	Coastal Road to Building 279	San Nicolas Island	14	33	16	47	119	31	Ventura
PTCL	Point Conception	Point Conception Lighthouse	Point Conception	60831012	55	34	27	7	120	Santa Barbara
CATA	Santa Catalina Isthmus Airport	Santa Catalina Island	Santa Catalina Island	37	33	26	30	118	29	Los Angeles
ANAH	Anaheim	1610 South Harbor Boulevard	Anaheim	60590001	45	34	6	1117	29	Orange
BRBK	Burbank	228 West Palm Avenue	Burbank	60371002	168	34	10	33118	18	Los Angeles
29PM	29 Palms	6136 Adobe Road	29 Palms	60710017	604	34	8	31116	3	San Bernardino
BARS	Barstow	301 Mountain View	Barstow	60710001	690	34	53	41117	1	MDAB
CERD	Riverside-CERCERT	1200 Columbia Avenue	Riverside	285	34	0	1	117	20	Riverside
AZSA	Azusa	803 North Loren Avenue	Azusa	60370002	183	34	8	9117	55	SoCAB
HAWH	Hawthorne	5234 West 120th Street	Hawthorne	60375001	21	33	55	51118	22	Los Angeles
PICO	Pico Rivera	3713 San Gabriel	Pico Rivera	60371001	75	34	0	51118	3	SoCAB
SOLM	Soledad Mountain	7120 Via Capri	La Jolla	251	32	50	27	117	15	SDAB
ALPN	Alpine	2301 Victoria Drive	Alpine	60731006	603	32	50	32116	46	SDAB
KRNM	Kearny Mesa-County Operation Center	Ruffin Road - End of Hazard Way	San Diego	60730006	160	32	50	11117	7	SDAB
OJAF	Ojai Forest	Sulphur Mtn Rd before intersection of Wells Cyn Rd	Ojai	610	34	25	22	119	9	Ventura
PINH	Pine Mountain High Site-August 4-6, 1997	Pine Mt Truck Trail near peak to the left side of the road	Azusa	1383	34	13	25	117	54	Los Angeles
PINL	Pine Mountain Low Site-September 4-7, 97	middle fork Pine Mt & Rincon Red Box Truck Trails	Azusa	1311	34	13	34	117	54	SoCAB
MBLD	Mount Baldy Village-Sep 28-29 & Oct 3-4	Mt Baldy Rd -past Hill the fork that deadends south	Mt. Baldy Village	60710217	1219	34	14	1417	39	San Bernardino
BANN	Banning	135 North Allesandro	Banning	60650002	640	33	55	16116	51	Riverside

Table 3-5
SCOS97-NARSTO RWP-RASS NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County	Air Basin
			AIRS	Elev	Latitude								
EMAM	El Monte Airport-RWP-RASS		El Monte	91	34	4	12	118	2	0	Los Angeles	SOCAB	
NAFB	Norton Air Force Base		Norton AFB	320	34	9	12	117	15	0	San Bernardino	SOCAB	
ALPM	Alpine-Met		Alpine	463	32	51	53	116	48	27	San Diego	SDAB	
BRVN	Brown Field		Brown Field Airport	160	32	34	20	116	58	46	San Diego	SDAB	
CARL	Carlsbad		Carlsbad	110	33	8	22	117	16	0	San Diego	SDAB	
CATM	Santa Catalina-Met-USC Research Station	USC Research Station Near Isthmus	Santa Catalina Island	37	33	26	44	118	28	56	Los Angeles	SOCAB	
ECNT	El Centro		El Centro	-15	32	40	12	115	29	20	Imperial	SSAB	
GOLE	Goleta		Goleta	3	34	25	46	119	50	47	Santa Barbara	SCCAB	
HUEN	Port Hueneme		Oxnard	2	34	9	54	119	13	8	Ventura	SOCAB	
LOSM	Los Alamitos		Los Alamitos	7	33	47	18	118	2	56	Orange	SOCAB	
PALD	Palmdale		Palmdale	777	34	36	46	118	5	26	Los Angeles	SOCAB	
SCLM	San Clemente Island-Met		San Clemente Island	53	33	1	7	118	35	7	San Diego	SDAB	
TUST	Tustin		Tustin	16	33	42	25	117	50	15	Orange	SOCAB	
USC2	USC-Hancock Fnd Bldg	3816 Trousdale Parkway	Los Angeles	67	34	1	10	118	17	2	Los Angeles	SOCAB	
VNUY	Van Nuys Airport		Van Nuys	241	34	12	57	118	29	31	Los Angeles	SOCAB	
BARM	Barstow-Met	12 Gauge Lake-10000 Ming Avenue	Barstow	694	34	55	23	117	18	25	San Bernardino	MDAB	
HESO	Hesperia-Oak Hills Center	19709 Yanan Road	Apple Valley	975	34	23	29	117	24	17	San Bernardino	MDAB	
RHIM	Riverside-H.J.Mills Water District	550 E. Alessandro Blvd.	Riverside	488	33	55	0	117	18	30	Riverside	SOCAB	
THRM	Thermal Airport	56860 Higgins Drive	Thermal	-39	33	38	25	116	9	35	Riverside	SOCAB	
TMCM	Temecula-East Municipal Water District	P.O. Box 8300	San Jacinto	335	33	30	0	117	9	40	Riverside	SOCAB	
LAXP	Los Angeles Airport		Los Angeles	47	33	56	24	118	26	10	Los Angeles	SOCAB	
ONTP	Ontario Airport		Ontario	290	34	3	22	117	36	11	San Bernardino	SOCAB	
ESCM	Valley Center Met-Miller Pumping Station	Valley Center Muni Water Dist-Dermid Rd End	Valley Center	305	33	15	19	117	2	40	San Diego	SDAB	
PTLP	Point Loma	End of Propogation-Building 599	Point Loma	30	32	41	48	117	15	15	San Diego	SDAB	
VBG	Vandenberg Air Force Base	Vandenberg AFB	Vandenberg AFB	364	34	45	0	120	34	12	Santa Barbara	SCCAB	
SVLM	Simi Valley Met - Madero Road Landfill*	End of Madero Road North	Simi Valley	611-0008	366	34	17	27	118	47	52	Ventura	SCCAB

Table 3-6
SCOS97-NARSTO SODAR NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County	Air Basin
			AIR\$	Elev	Latitude								
AZSM	Azusa-Met		Azusa	232	34	9	37	117	54	17	Los Angeles	SOCAB	
CLAR	Santa Clarita Valley	Santa Clarita		450	34	25	27	118	31	37	Los Angeles	SOCAB	
WSPM	Warner Springs - Met Site	Hwy 79-Puerta La Cruz Road-1 mile from hwy	Warner Springs	945	33	19	5	116	41	3	San Diego	SDAB	
VBG	Vandenberg Air Force Base		Vandenberg AFB		364	34	45	0	120	34	12	Santa Barbara	SCCAB
29PA	29 Palms-Sand Hill-Turtle Site	29 Palms Marines Base-Air Ground Combat Center	29 Palms	764	34	18	40	116	15	10	San Bernardino	MDAB	
29PB	29 Palms-Expeditionary Air Field (<8/20/97)	29 Palms Marines Base-Air Ground Combat Center	29 Palms	610	34	17	50	116	9	47	San Bernardino	MDAB	
29PC	29 Palms-Expeditionary Air Field (>8/20/97)	29 Palms Marines Base-Air Ground Combat Center	29 Palms	619	34	17	53	116	10	15	San Bernardino	MDAB	
LOSM	Los Alamitos		Los Alamitos		7	33	47	18	118	2	56	Orange	SOCAB

Table 3-7
SCOS97-NARSTO RAWINSONDE NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County	Air Basin
			AIR\$	Elev	Latitude								
BAKM	Bakersfield-Met	1031 Mount Vernon Avenue	Bakersfield	99	35	20	44	118	57	59	Kern	SJVAB	
RIRD	Riverside-CERCERT-Facility	1200 Columbia Avenue	Riverside	302	34	0	0	117	20	9	Riverside	SOCAB	
UCLA	UCLA-Met-Math Science Building	425 N. Hilgard Ave-Circle Drive-West of Franz Hall	Los Angeles	122	34	4	11	118	25	59	Los Angeles	SOCAB	
NKX	Miramar National Weather Service Launch	Keamy Villa Rd North 1 mile Soledad Fwy right gate	Miramar	137	32	52	43	117	7	25	San Diego	SDAB	
POMN	Pomona-security concern-fast TOP no PM launch	Gary Avenue	Pomona	274	34	4	31	117	45	1	Los Angeles	SOCAB	
EDWD	Edwards AFB		Edwards	723	34	54	0	117	54	0	Kern	MDAB	
VBG	Vandenberg Air Force Base		Vandenberg AFB	364	34	45	0	120	34	12	Santa Barbara	SCCAB	
29PD	29 Palms-Expeditionary Air Field	29 Palms Marines Base-Air Ground Combat Center	29 Palms	611	34	10	48	116	5	24	San Bernardino	MDAB	
TUSR	Tustin MCAS		Tustin	17	33	42	0	117	50	0	Orange	SOCAB	
CHLK	China Lake Naval Air Warfare Center	Amitage Field	China Lake	665	35	45	0	117	40	48	Kern	MDAB	
NALF	Imperial Beach/Alt Site for NVAS Launches	Naval Auxiliary Field	San Diego	9	32	34	58	117	7	8	San Diego	SDAB	
NVAS	Naval Air Station-North Island	Halsey Field	San Diego	0	32	20	24	117	4	12	San Diego	SDAB	
PMGU	Point Mugu Naval Air Station	Building 552	Oxnard	3	34	7	16	119	7	20	Ventura	SCCAB	
SNIC	San Nicolas Island NE Bldg 279	Coastal Road to Building 279	San Nicolas Island	14	33	16	47	119	31	11	Ventura	SCCAB	

Table 3-8
SCOS97-NARSTO OZONE SONDE NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	County	Air Basin
			AIRS	Elev	Latitude					
CSUN	Cal State Northridge	18111 Nordhoff Street-Building	Northridge		267	34	14	13	118	47 Los Angeles
USCZ	USC-Hancock Fnd Bldg	3616 Trousdale Parkway	Los Angeles		67	34	1	10	118	2 Los Angeles
VCNO	Valley Center-CE-CERT Ozone Sonde	28216 Valley Center	Valley Center		366	33	13	57	117	2 SoCAB
ANAH	Anaheim	1610 South Harbor Boulevard	Anaheim	60590001	45	34	6	0.9	117	28 San Diego
POMA	Pomona-security concern-last IOP no night launch	9224 North Gary Avenue	Pomona	60371701	274	34	4	2	117	31.5 Orange
ULDS	Upland - moved after training	1350 San Bernardino Aven Sp 62	Upland	60711003	379	34	5	52	117	7 Los Angeles
ESCO	Valley Center (Escondido)	6000 East Valley Parkway-	Escondido	60731002	415	33	12	57	117	0 Riverside
PMGU	Point Mugu Naval Air Station	Building 552	Oxnard		3	34	7	16	119	7 San Diego
										SDAB
										SCCAB

Table 3-9
SCOS97-NARSTO LIDAR Sites

ID	Name	Address	City	(msl)	DD	MM	SS	County	Air Basin
			Elev	Latitude					
EMAL	El Monte Airport-Lidar		El Monte	91	34	4	12	118	0 Los Angeles
HESL	Hesperia-Lidar @ Oak Hills Water Tank	Oak Hills Road 2 Miles south of HWY 15 HWY 395 Exit	Hesperia	1175	34	23	28	117	10 San Bernardino

Table 3-10
SCOS97-NARSTO AIRPLANES

ID	Name	Address	City	(msl)	DD	MM	SS	County	Air Basin
			Elev	Latitude					
CIRP	CIRPAS Pelican @ El Monte Airport		El Monte	91	34	4	12	118	2 Los Angeles
SD-C	CESSNA-SDAPCD @ Montgomery Field	6 miles north of San Diego	San Diego	129	32	48	57	117	3 SoCAB
SD-N	NAVAJO @ Montgomery Field	6 miles north of San Diego	San Diego	129	32	48	57	117	25 San Diego
STIA	AZTEC @ Camarillo Airport		Camarillo	23	34	12	49	119	8 SDAB
UCDA	CESSNA-UC Davis @ El Monte		El Monte	91	34	4	12	118	5 SCCAB
USNP	Pathavia US Navy @ Oxnard Airport		Oxnard	13	34	12	2	119	25 Ventura

3.2 Existing Surface Air Quality and Meteorological Monitoring Sites

The Routine Network is the network of air quality and meteorological data gathering stations in the SCOS97-NARSTO domain – South Coast, San Diego, South Central Coast, Mojave Desert, Salton Sea, and southern parts of San Joaquin Valley air basins – that report their data to AIRS. As noted before, parameters measured at each existing site are available from the United States Environmental Protection Agency's Aerometric Information Retrieval System (AIRS) and appendices A and B Volume I of this document. Please also note that the best reference document on particulars of working with AIRS stations in southern California is the annual ARB State and Local Air Monitoring Network Plan. Tables 1 to 6 provide details of stations within each air basin with the SCOS97-NARSTO domain:

The South Coast AQMD has closed many stations within the last three years – Commerce-61st Street, Commerce AT&SF Railroad, Commerce-Ayers Avenue, Diamond Bar, Industry-Clark, Industry-Don Julian, Industry-Volkswagen, Santa Fe Springs, Hemet, Norco, and Temecula. Some stations operate to monitor one or two air quality parameters sometimes due to their compliance status [Riverside Magnolia and Ontario Airport]. The SCAQMD has also operated Jurupa Valley High School, Lake Arrowhead, San Dimas, and the UC Riverside Agricultural Experimental stations at the behest of the Children's Health Study Program. Data from these stations, as well as certain specialty aerosol data, are not reported to AIRS.

The San Diego CAPCD operates the Soledad Mountain site on a semi-permanent basis and works closely with the Children's Health Study program for operations at Alpine. The San Diego CAPCD only operates the Union Street site for carbon monoxide monitoring.

Many aerosol sites in the Mojave Desert air basin – China Lake Power Line, Inyokern Airport, Ridgecrest Las Flores Avenue, and Tehachapi Jameson Road – have not submitted data to AIRS for the SCOS97-NARSTO period. The Children's Health Study program also operates at Lancaster.

Salton Sea air basin sites – Bombay Beach, Brawley, Mesquite, Niland, Seeley, Westmoreland, and Winterhaven – did not supply ozone or aerosol data to AIRS. All except the last two did not commence operations as planned.

South Central Coast air basin Routine Network is managed by Santa Barbara, San Luis Obispo, and Ventura CAPCDs. In the past three years, San Luis Obispo CAPCD has closed Nipomo South Wilson Street and San Luis Obispo Lewis stations. The Atascadero site is part of the Children's Health Study program. Santa Barbara CAPCD has closed Battles Betteravia Road, Gaviota A, Jalama Beach, and Vandenberg Air Force Base Point Arguello and Watt Road stations. The Santa Maria Library site is not closed but offers no information during the SCOS97-NARSTO study. Las Flores Canyon sites 2 and 3 only provide information on nitrogen and sulfur dioxides. Ventura CAPCD has closed the Ventura East Main Street site and has moved the Ojai station to the Ojai Avenue Fire Station.

Certain Kern county portions of the San Joaquin Valley air basin were also part of the SCOS97-NARSTO domain. ARB operates Arvin, Bakersfield California Street, Oildale, and Shafter stations and San Joaquin UAPCD operates Bakersfield Golden State and Maricopa sites. These stations' data at AIRS provides background information on meteorology and on air quality in southern California and helps data analysts and modelers to understand the context of SCOS97-NARSTO.

The SCOS97-NARSTO meteorological modeling begins with domains much larger than the study domain. The SCOS97-NARSTO surface routine meteorological networks do exceed the geographical study domain so that their data can be used as inputs to SCOS97-NARSTO meteorological models. These networks are described in detail in volume V of this document.

These meteorological networks have not been designed and are not operated to provide information for air quality planning. Consequently, there is significant variability in the type of data collected, on meteorological parameters of interest, and on the QA aspects of their operation. The California water control resources boards have run the CIMIS network, to gather data for preservation of water and soil resources and for watershed planning. The National Weather Service sites provide data for weather forecasting, fire prevention, road safety, air traffic, ocean navigation, and preparation for natural emergencies. The National Park Service stations are designed to monitor and to maintain the health and the vitality of the wild flora and fauna at the national parks. The NPS Air Resources Division, in partnership with parks and others, works to preserve, protect, enhance, and understand air quality and other resources sensitive to air quality in the National Park System. Their world wide web site provides access to resources such as the IMPROVE network and other U.S. government monitoring programs. The US Forest Service stations have a function similar to the National Parks network and the selection noted in the SCOS97-NARSTO atlas is concentrated in the SoCAB and SCCAB. The US Navy sites have national security purposes and the selection noted in the SCOS97-NARSTO atlas are concentrated in the SCCAB and the SDAB. The United States Department of Interior Bureau of Land Management meteorological stations have been in operation to monitor preservation and wise use of national resources. Finally, the CCOHD and the MCOHD meteorological networks include a few sites in the SCOS97-NARSTO domain. CCOHD is mostly centered around Las Vegas and Henderson, Nevada. MCOHD stations are mostly around Phoenix Arizona. CIMIS data is available from the California department of Water Resources. With some exceptions, data from other sites are available through the Western Regional Climate Center (WRCC). The site locations, names, and designations are subject to change without notice and many sites may be moved taken out of operation, or combine, and new sites can be added. For the best and most current information, please consult WRCC at DRI.

The existing meteorological and air quality networks in southern California provide the background data useful to analysis and modeling of the SCOS97-NARSTO study. There are so many stations that data from nearby sites can be compared for quality control purposes. For example, the CIMIS, and the Children's Health Study-SCAQMD produce meteorological data at UC Riverside Agricultural Experimental station. The SCOS97-NARSTO atlas is recommended as a resource to guide these types of data comparison.

Table 3.2-1
SOUTH COAST AIR BASIN ROUTINE NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County
			AIRs	AIRs	Elev	Latitude						Longitude
AZSA	Azusa	803 North Loren Avenue	Azusa	60370002	183	34	8	9	117	55	22	Los Angeles
BRBK	Burbank	228 West Palm Avenue	Burbank	60371002	168	34	10	33	118	18	57	Los Angeles
GLDR	Glendora	840 Laurel	Glendora	60370016	275	34	8	40	117	51	0.3	Los Angeles
HAWH	Hawthorne	5234 West 120th Street	Hawthorne	60375001	21	33	55	51	118	22	8	Los Angeles
LANM	Los Angeles North Main	1630 North Main Street	Los Angeles	60371103	87	34	4	1	118	13	36	Los Angeles
NLGB	Long Beach	3648 N Long Beach	Long Beach	60374002	6	33	49	27	118	11	0.2	Los Angeles
PDSW	Pasadena	752 S. Wilson Ave	Pasadena	60372005	250	34	5	2	118	6	28	Los Angeles
PICO	Pico Rivera	3713 San Gabriel	Pico Rivera	60371601	75	34	0	51	118	3	38	Los Angeles
POMA	Pomona	924 North Gary Avenue	Pomona	60371701	274	34	4	2	117	45	7	Los Angeles
RSDA	Reseda	18330 Gault St	Reseda	60371201	226	34	11	57	118	31	58	Los Angeles
SCLR	Santa Clarita	San Fernando Rd-County Fire Station	Santa Clarita	60376002	375	34	23	16	118	32	2	Los Angeles
VALA	West Los Angeles	VA Hospital	Los Angeles	60370113	91	34	3	2.7	118	27	24	Los Angeles
LYNW	Lynwood	11220 Long Beach Blvd	Lynwood	60371301	27	33	55	44	118	12	35	Los Angeles
ANAH	Anaheim	1610 South Harbor Boulevard	Anaheim	60590001	45	34	6	0.9	117	29	32	Orange
CMMV	Costa Mesa	2850 Mesa Verde Dr	Costa Mesa	60591003	25	33	40	29	117	55	47	Orange
ELTR	El Toro	23022 El Toro Road		60592001	137	33	37	38	117	41	28	Orange
LHAB	La Habra	621 W. Lambert	La Habra	60595001	82	33	55	33	117	57	3	Orange
BANN	Banning	135 North Allesandro	Banning	60650002	722	33	55	16	116	51	30	Riverside
LELS	Lake Elsinore	506 W Flint St	Lake Elsinore	60659001	440	33	40	35	117	19	51	Riverside
PERR	Peris	237.5 N "D" St	Peris	60656001	439	33	47	20	117	13	39	Riverside
RIVM	Riverside	7002 Magnolia Ave	Riverside	60651003	249	33	56	45	117	24	0	Riverside
RUBI	Rubidoux	5888 Mission Blvd	Riverside	60658001	250	34	0	35	117	25	33	Riverside
FONT	Fontana	14360 Arrow Blvd	Fontana	60712002	381	34	6	0.8	117	29	24	San Bernardino
LGRE	Crestline-Lake Gregory	Lake Dr	Crestline	60710005	1384	34	14	38	117	16	26	San Bernardino
ONTX	Ontario Airport		Ontario	60716001	330	34	3	16	117	35	16	San Bernardino
ROLD	Redlands	500 N. Dearborn	Redlands	60714003	481	34	3	35	117	9	35	San Bernardino
SANB	San Bernardino	24302 4th St	San Bernardino	60719004	336	34	6	24	117	16	25	San Bernardino
ULDS	Upland	1350 San Bernardino Aven Sp 62	Upland	60711003	379	34	5	52	117	39	0	San Bernardino

Table 3.2-2

SAN DIEGO AIR BASIN ROUTINE NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County
			AIRS	Elev								
ALPN	Alpine	2301 Victoria Drive	Alpine	60731006	603	32	50	32	116	46	6.4	San Diego
CHVT	Chula Vista	80 E "J" St	San Diego	60730001	56	33	49	13	117	54	48	San Diego
DMMC	Del Mar Mira Costa College	225 Ninth Street	Del Mar	60731001	35	32	57	10	117	15	46	San Diego
ECAJ	EI Cajon	1155 Redwood Ave	EI Cajon	60730003	143	32	47	27	116	56	33	San Diego
ESCO	Valley Center (Escondido)	600 East Valley Parkway-	Escondido	60731002	204	33	12	57	117	7	43	San Diego
OCEA	Oceanside	11701 Mission Ave	Oceanside	60730005	37	33	12	10	117	22	1	San Diego
OTAY	Otay	1100 Paseo International	Otay	60732007	155	32	35	2	116	56	16	San Diego
PEND	Camp Pendleton (Camp Del Mar)	Site next to 21448 Del Mar Marina	Camp Del Mar	60731008	6	33	13	2	117	23	46	San Diego
SD12	San Diego	330A 12TH AVE	San Diego	60731007	6	32	42	32	117	9	10	San Diego
SDOV	San Diego	5555 Overland Ave	San Diego	60730006	135	32	49	40	117	7	58	San Diego
SDUN	San Diego	11133 Union St	San Diego	60730007	15	32	43	1	117	9	53	San Diego

Table 3.2-3

MOJAVE DESERT AIR BASIN ROUTINE NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County
			AIRS	Elev								
LANC	Lancaster	315 West Pondera Street, Suite C 923 Poolie St	Lancaster	60379002	725	34	41	25	118	7	59	Los Angeles
MOJP	Mojave	6136 Adobe Road	Mojave	60290011	853	35	3	1	118	8	53	Kern
2SPN	29 Palms	301 Mountain View	29 Palms	60710017	604	34	8	31	116	3	18	San Bernardino
BARS	Barstow	17288 Olive St	Barstow	60710001	690	34	53	41	117	1	26	San Bernardino
HESP	Hesperia	Joshua Tree National Monument	Hesperia	60714001	1006	34	24	57	117	17	98	San Bernardino
JOSL	Lucern Valley	Lost Horse Min-moved to Black Rock Cyn 1993	Joshua Tree	60719002	1244	34	4	17	116	23	26	San Bernardino
LUCN	Phelan	Lucern Valley Middle School-8560 Aliento Beekley & Phelan Rds	Lucern Valley	60710013	1036	34	24	30	116	54	25	San Bernardino
PHEI	Trona Athol	83732 Trona Rd	Phelan	60710012	1250	34	25	29	117	35	25	San Bernardino
TRNA	Victorville	14029 Amargosa Rd	Trona	60710015	498	35	46	27	117	22	71	San Bernardino
VICT			Victorville	60710014	876	34	30	15	117	19	47	San Bernardino

Table 3.2-4
SALTON SEA AIR BASIN ROUTINE NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County
			AIRS	Elev	Latitude							
CLXC	Calexico Grant Street	900 Grant St	Calexico	60250004	0	32	40	27	115	30	56	Imperial
CALE	Calexico Ethel Street	Calexico High School Ethel Street	Calexico	60250005	1	32	40	35	115	28	60	Imperial
CLXE	Calexico East		Calexico	60250006		32	40	29	115	23	28	Imperial
EC9S	El Centro	150 9th St	El Centro	60251003	0	32	47	38	115	33	45	Imperial
INDO	Indio	46-390 Jackson St	Indio	60652002	-6	33	42	30	116	12	57	Riverside
PALM	Palm Springs	FS 590 Racquet Cl	Palm Springs	60655001	171	33	51	17	116	32	31	Riverside

Table 3.2-5
SOUTH CENTRAL COAST AIR BASIN ROUTINE NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County
			AIRS	Elev	Latitude							
ARGR	Arroyo Grande	Raicoa Way	Arroyo Grande	60791005	300	35	2	38	120	34	51	San Luis Obispo
ATAS	Atascadero	6005 Lewis Ave	Atascadero	60798001	860	35	29	31	120	40	5.2	San Luis Obispo
GCTY	Grover City	9 Lesage Dr	Grover City	60792001	5	35	7	30	120	37	58	San Luis Obispo
MOBY	Morro Bay	Morro Bay BL & Kemir	Morro Bay	60793001	18	35	22	0.7	120	50	42	San Luis Obispo
NIFO	Nipomo	1300 Guadalupe Rd	Nipomo	60792004	60	35	1	19	120	34	8	San Luis Obispo
PSRB	Paso Robles	235 Santa Fe Ave	Paso Robles	60790005	100	38	34	0	121	29	0	San Luis Obispo
SLON	San Luis Obispo	1160 Marsh St	San Luis Obispo	60792002	66	35	17	2	120	39	14	San Luis Obispo
CPGB	Carpinteria	Gobernador Rd	Carpinteria	60831021	137	34	24	12	119	27	29	Santa Barbara
ECSP	El Capitan State Park	N of Chevron Plant	Gaviota	60830008	39	34	27	45	120	1	28	Santa Barbara
GAVE	Gaviota East		Gaviota	60831016	105	34	28	40	120	12	23	Santa Barbara
GAVW	Gaviota West	380 W Fairview Ave	Gaviota	60831015	91	34	28	41	120	12	39	Santa Barbara
GLWF	Goleta	GTC B HWY 101	Goleta	60832011	50	34	26	44	119	49	44	Santa Barbara
GTCB	Nojoqui Pass	GTC C 1 Mile E of Plant	Gaviota	60831018	305	34	31	39	120	11	44	Santa Barbara
GTCG	Gaviota		Gaviota	60831019	82	34	28	30	120	11	20	Santa Barbara
LFC1	Capitan LFC #1	Las Flores Canyon	Las Flores Canyon	60831025	189	34	29	23	120	2	45	Santa Barbara
LFC2	Capitan LFC #2	Las Flores Canyon	Las Flores Canyon	60831026	257	34	28	46	120	1	57	Santa Barbara
LFC3	Capitan LFC #3	Las Flores Canyon	Las Flores Canyon	60831027	146	34	28	9	120	2	22	Santa Barbara
LOMP	Lompoc Cabrillo High School	4350 Constellation Road	Lompoc	60830006	0	34	42	39	120	28	11	Santa Barbara

LOS P	Los Padres National Forest	Paradise Rd		Los Padres Forest	60831014	547	34	32	29	119	47	26	Santa Barbara
LPH S	Lompoc	HS&P Facility 500 meters SW C-128 S 'H' St	Lompoc	Lompoc	60831013	220	34	43	32	120	25	40	Santa Barbara
LPS H	Lompoc	Point Conception Lighthouse	Lompoc	Point Concepcion	60832004	32	34	38	16	120	27	24	Santa Barbara
PTCL	Point Conception Light House	Ozone Site Near Shore line	Santa Rosa Island	Santa Rosa Island	60831012	55	34	27	7	120	27	28	Santa Barbara
ROSA	Santa Rosa Island A	3 W. Carrillo St	Santa Barbara	Santa Barbara	60832012	15	34	1	0	120	3	0	Santa Barbara
SBWC	Santa Barbara	500 S Broadway	Santa Maria	Santa Maria	60830010	71	34	25	15	119	42	3	Santa Barbara
SMSB	Santa Maria Broadway	Library	Santa Maria	Santa Maria	60831007	57	34	56	54	120	26	2.8	Santa Barbara
SMSL	Santa Maria Library	Airport Rd	Santa Ynez	Santa Ynez	60834001	57	34	56	56	120	26	4	Santa Barbara
SYAP	Santa Ynez	ARCO Tank, IS	Santa Barbara	Santa Barbara	60833001	210	34	36	30	120	4	23	Santa Barbara
UCSB	UCSB West Campus	STS Power Plant	Vandenberg AFB	Vandenberg AFB	60831020	9	34	24	56	119	52	43	Santa Barbara
VBPP	Vandenberg Air Force Base	EI Rio-Rio Mesa School No. 2	EI Rio	EI Rio	60834003	104	34	35	45	120	37	49	Santa Barbara
ELRO	EI Rio	Emma Wood State Beach			61113001	34	34	15	53	119	8	2	Ventura
OJAI	Ojai	1201 Ojai Road	Ojai	Ojai	61112003	3	34	16	50	119	18	55	Ventura
PRTG		2SW-2815 Telegraph Rd	Piru	Piru	6111004	305	34	26	53	119	13	52	Ventura
SVAL	Simi Valley-High School	5400 Cochran Street-Stowe 2nd Gate Aux Bldg	Simi Valley	Simi Valley	61110004	182	34	23	56	118	49	26	Ventura
THOS	West Casitas Pass-Oak View	5500 Casitas Pass Rd	Casitas Pass	Casitas Pass	61112002	310	34	16	37	118	36	44	Ventura
TOMP	Thousands Oaks	9 2323 Moorpark	Thousands Oaks	Thousands Oaks	61110005	320	34	23	13	119	24	57	Ventura
					61110007	232	34	12	36	118	52	8	Ventura

Table 3.2-6
SAN JOAQUIN VALLEY AIR BASIN - SCOS97-NARSTO DOMAIN - ROUTINE NETWORK

ID	Name	Address	City	Site No.	(msl)	DD	MM	SS	DD	MM	SS	County
			AIR\$	Elev	Latitude				Longitude			
ARVN	Arvin	20401 Bear Mountain Blvd.	Arvin	60295001	145	35	12	32	118	46	35	Kern
BLFC	Bakersfield	5558 California St	Bakersfield	60290014	114.6	35	21	21	119	2	23	Kern
EDSN	Edison	Johnson Farm	Edison	60290007	425	35	20	45	118	51	3	Kern
OLDL	Oildale	3311 Manor St	Oildale	60290232	180	35	26	20	119	0	57	Kern
SHFT	Shafter	548 Walker Street	Shafter	60296001	126	35	30	14	119	16	19	Kern
BKGS	Bakersfield	1138 Golden State	Bakersfield	60290010	151	35	23	5	119	0	53	Kern
MRCP	Maricopa	755 Stanislaus Street	Maricopa	60290008	289	35	8	16	19	24	14	Kern

Table 3.2-7
CIMIS SURFACE ROUTINE METEOROLOGICAL NETWORK

ID	Name	Address	City	CIMIS (msl)	DD	MM	SS	DD	MM	SS	County	Air Basin	
			No.	Elev	Latitude			Longitude					
ARED	Arvin	Edison	Arvin	125	46	35	12	22	118	46	40	Kern	
BKWC	Blackwells Corner	Hwy 33 & Hwy 46	Lost Hills	54	215	35	38	59	119	57	30	Kern	
BRST	BARSTOW NE		Barstow	134	189	34	53	3	116	59	0	Kern	
BLHT	BLYTHE NE		Blythe	135	26	33	24	114	39	59	Riverside	MDAB	
BSHP	Bishop		Bishop	35	387	37	21	29	118	24	14	Inyo	GBVAB
CAMB	Calipatria	Mulberry	Calipatria	41	-33	33	2	37	115	24	56	Imperial	SSAB
CATH	Cathedral City		Cathedral City	118	12	33	50	33	116	28	44	Imperial	SSAB
CLRM	Claremont		Claremont	82	494	34	7	48	117	41	46	Los Angeles	SocAB
CUYA	Cuyama		Cuyama	88	698	34	55	54	119	36	17	Santa Barbara	SCCAB
ELDO	El Dorado		Los Alamitos	102	5	33	47	50	118	5	38	Orange	SocAB
ESCD	Escondido		Escondido	74	137	33	5	24	116	58	52	San Diego	SDAB
FRBH	Firebaugh	Telles	Firebaugh	7	56	36	51	4	120	35	25	Fresno	SJVAB
FSU	Fresno State		Fresno	80	103	36	49	15	119	44	31	Fresno	SJVAB
FVPT	Five Points	WSFS United States Department of Agriculture	USDA	2	87	36	20	11	120	6	47	Fresno	SJVAB
GAFH	Goleta Foothills		Goleta	94	195	34	28	18	119	52	4	Santa Barbara	SCCAB
GLEL	GLENDALE		Glendale	133	103	33	34	8	112	11	23	Los Angeles	SocAB
GUAD	Guadalupe		Guadalupe	120	34	34	57	42	120	32	48	Santa Barbara	SCCAB
HAST	Dozier	Hastings Tract & Salina Road	Dozier	122	1	38	16	57	121	47	24	Solano	SJVAB

HOPL	Hopland Forest	Hopland	85	354	39	0	25	123	4	45	Mendocino	NCA/B
IRV	Irvine	Irvine	75	125	33	41	19	117	43	14	Orange	SoCAB
KEST	Kesterson	Kesterson	92	23	37	13	57	120	52	48	Merced	SJVAB
KETT	Kettleman City	Kettleman City	21	104	35	52	8	119	53	39	Kings	SJVAB
LIND	Lindcove	Lindcove	86	146	36	21	26	119	3	31	Tulare	SJVAB
LODI	Lodi	Lodi	42	7	38	6	34	121	20	46	San Joaquin	SJVAB
LOS8	Los Banos	Los Banos	56	29	37	5	30	120	45	35	Merced	SJVAB
MANT	Manteca	Manteca	70	10	37	50	5	121	13	22	San Joaquin	SJVAB
MELO	Meloland	Meloland	87	-14	32	48	24	115	26	46	Imperial	SSAB
MODE	Modesto	Modesto	71	11	37	38	10	121	11	10	San Joaquin	SJVAB
OASS	OASIS	Oasis	136	1	33	31	32	116	9	15	Riverside	SSAB
OCSD	Oceanside	Oceanside	49	15	33	15	21	117	19	11	San Diego	SDAB
PANO	Panoche	Panoche	124	56	36	53	25	120	43	56	San Benito	NCCAB
PIRU	Piru	Piru	101	195	34	22	30	118	47	20	Ventura	SCCAB
PLVD	Palo Verde	Palo Verde	72	70	33	23	15	114	43	21	Imperial	SSAB
POMO	Pomona	Pomona	78	223	34	3	30	117	48	42	Los Angeles	SoCAB
PRLR	Palier	Palier	39	103	36	35	52	119	30	11	Fresno	SJVAB
PTHU	Port Hueneme	Port Hueneme	97	5	34	10	24	119	12	0	Ventura	SCCAB
RAMO	Ramona	Ramona	98	409	33	2	58	116	56	18	San Diego	SDAB
SAND	SAN DIEGO	San Diego	66	34	32	43	59	117	8	5	San Diego	SDAB
SELY	Seeley	Seeley	68	12	32	45	34	115	43	54	Imperial	SSAB
SHAF	Shafter	Shafter	5	110	35	31	59	119	16	52	Kern	SJVAB
SLOP	San Luis Obispo	San Luis Obispo	52	101	35	18	22	120	39	37	San Luis Obispo	SCCAB
SLTE	Salton Sea East	Salton Sea	128	-20	33	13	12	115	34	48	Imperial	SSAB
SLTW	Salton Sea West	Salton Sea	127	-20	33	19	38	115	57	0	Imperial	SSAB
SNBA	Santa Barbara	Santa Barbara	107	76	34	26	16	119	44	10	Santa Barbara	SCCAB
SNTM	Santa Maria	Santa Maria	38	82	34	57	16	120	23	3	Santa Barbara	SCCAB
SNTY	Santa Ynez	Santa Ynez	64	149	34	34	59	120	4	41	Santa Barbara	SCCAB
STAM	Santa Monica	Santa Monica	99	104	34	2	28	118	28	34	Los Angeles	SoCAB
STRA	Stratford	Stratford	15	59	36	9	27	119	51	0	Kings	SJVAB
TEME	Temecula	Temecula	62	433	33	29	25	117	13	20	Riverside	SoCAB
THEF	Thermal	Thermal	50	-8	33	38	47	116	14	30	Riverside	SoCAB
TME2	Temecula-East	Temecula	130	457	33	33	23	117	2	13	Riverside	SoCAB
UCR	UC Riverside	Riverside	44	311	33	57	54	117	20	8	Riverside	SoCAB
VSLA	Visalia	Visalia	33	107	36	18	3	119	13	23	Tulare	SJVAB

VTRV	Victorville		Victorville	117	269	34	28	42	117	15	40	San Bernardino	MDAB
WTLD	Westlands		Westlands	105	58	36	38	0	120	22	55	Fresno	SJVAB

Table 3.2-8
NATIONAL WEATHER SERVICE ROUTINE METEOROLOGICAL NETWORK

ID	Name	City	(msl)	DD	MM	SS	DD	MM	SS	County	Air Basin
			Elev	Latitude			Longitude				
87Q	San Simeon Point Piedras	San Simeon	6	35	26	56	121	16	48	San Luis Obispo	SCCAB
BFL	Bakersfield	Bakersfield	150	35	35	0	119	3	0	Kern	SJVAB
BIH	Bishop	Bishop	1263	37	22	0	118	22	0	Inyo	GBVAB
BLH	Blythe	Blythe	36	33	37	0	114	43	0	Riverside	MDAB
BUO	Beaumont	Beaumont	792	33	56	0	116	56	0	Riverside	SoCAB
BUR	Burbank	Burbank	223	34	12	0	118	21	30	Los Angeles	SoCAB
BYS	Fort Irwin Barstow Bicycle Lake	Fort Irwin	764	35	18	0	116	39	0	San Bernardino	MDAB
CMA	Camarillo	Camarillo	23	34	12	48	119	5	36	Ventura	SCCAB
CNO	Chino	Chino	198	33	58	30	117	38	12	Riverside	SoCAB
CRQ	Carlsbad	Carlsbad	100	33	7	42	117	16	48	San Diego	SDAB
CZZ	Campo	Campo	245	32	26	0	116	28	0	San Diego	SDAB
DAG	Daggett Barstow Airport	Daggett	540	34	52	0	116	47	0	San Bernardino	MDAB
DRA	Desert Rock Airfield	Private Airfield	365	36	30	0	115	50	0	Nevada	Nevada
EDW	Edwards AFB	Edwards	702	34	54	0	117	52	12	Kern	MDAB
EED	Needles	Needles	302	34	46	6	114	37	30	San Bernardino	MDAB
EMT	El Monte	El Monte	91	34	4	12	118	2	0	Los Angeles	SoCAB
FAT	Fresno	Fresno	102	36	46	36	119	43	0	Fresno	SJVAB
FFZ	Mesa, Arizona	Mesa, Arizona	424	33	27	36	111	43	36	Arizona	Arizona
FHU	Fort Huachuca, Arizona	Ft. Huachuca, Arizona	1438	31	35	18	110	20	36	Arizona	Arizona
FLG	Flagstaff, Arizona	Flagstaff, Arizona	652	35	8	0	111	40	0	Arizona	Arizona
FUL	Fullerton	Fullerton	29	33	52	12	117	58	54	Orange	SoCAB
GBN	Gila Bend, Arizona	Gila Bend-Arizona	237	32	57	30	112	40	42	Arizona	Arizona
GCN	Grand Canyon	Grand Canyon-Arizona	649	36	3	0	112	8	0	Arizona	Arizona
HHR	Hawthorne	Hawthorne	19	33	55	24	118	20	6	Los Angeles	SoCAB
IGM	Kingman, Arizona	Kingman, Arizona	1051	35	15	24	113	56	24	Arizona	Arizona
IPL	Imperial	Imperial	-16	32	50	12	115	34	30	Imperial	SSAB
WVA	Williams Air Force Base, Arizona	WAFFB	377	33	16	0	111	48	54	Arizona	Arizona

IZA	Santa Ynez	Santa Ynez	205	34	36	30	120	4	30	Santa Barbara	SCCAB
KBAB	Beele Air Force Base NEXRAD		72	39	29	33	121	36	30	Yuba	SVAB
KEKA	Eureka NEXRAD	Eureka	766	40	29	55	124	17	27	Humboldt	NCAB
KEKO	Elko, Nevada NEXRAD	Elko	2088	40	44	24	116	48	6	Nevada	Nevada
KFAT	San Joaquin Valley NEXRAD	Hanford	100	36	18	49	119	37	52	Kings	SJVAB
KFLG	Flagstaff, Arizona NEXRAD	Flagstaff, Arizona	2220	35	7	32	111	32	52	Arizona	Arizona
KGJT	Grand Junction, Colorado NEXRAD	Grand Junction, CO	3064	39	3	44	108	12	44	Colorado	Colorado
KLAS	Las Vegas, Nevada NEXRAD	Las Vegas	1505	35	42	4	114	53	30	Nevada	Nevada
KLAX	Los Angeles NEXRAD	Los Angeles	854	34	24	42	119	10	43	Los Angeles	SoCAB
KMFR	Medford, Oregon NEXRAD	Medford	2305	42	4	52	122	42	58	Oregon	Oregon
KRIV	March Air Force Base NEXRAD	Riverside	430	33	35	54	117	7	10	Riverside	SoCAB
KRNO	Reno NEXRAD	Reno, Nevada	2558	39	45	15	119	27	31	Nevada	Nevada
KSAC	Sacramento NEXRAD	Sacramento	8	38	31	0	121	30	0	Sacramento	SVAB
KSAN	San Diego NEXRAD	San Diego	318	32	55	8	117	2	28	San Diego	SDAB
KSFO	San Francisco NEXRAD	San Francisco	1075	37	9	19	121	53	35	San Francisco	SFBAA
KSLC	Salt Lake City, Utah NEXRAD	Salt Lake City, Utah	2004	41	15	45	112	26	48	Utah	Utah
KTUS	Tucson, Arizona NEXRAD	Tucson, Arizona	875	31	57	25	110	53	56	Arizona	Arizona
KVBG	Vanderberg Air Force Base NEXRAD	Vandenberg	396	34	50	17	120	23	45	Santa Barbara	SCCAB
KVCV	Edwards Air Force Base NEXRAD	Boron	870	35	5	52	117	33	36	Kern	MDAB
KVTX	Sulphur Mountain NEXRAD	Ojai	856	34	24	43	119	10	44	Ventura	SCCAB
KYUM	Yuma, Arizona NEXRAD	Yuma, Arizona	82	32	39	45	114	36	35	Arizona	Arizona
L27	Avalon	Santa Catalina Island	42	33	21	0	118	19	0	Los Angeles	SoCAB
L63	Indian Springs, Nevada	Indian Springs, Nevada	290	36	35	0	115	40	0	Nevada	Nevada
LAS	Las Vegas, Nevada	Las Vegas, Nevada	663	36	5	0	115	9	12	Nevada	Nevada
LAX	Los Angeles Airport	Los Angeles	38	33	56	36	118	24	24	Los Angeles	SoCAB
LGB	Long Beach	Long Beach	17	33	49	6	118	9	0	Los Angeles	SoCAB
LSV	Nellis Air Force Base, Nevada	Nellis AFB, Nevada	569	36	15	0	115	2	0	Nevada	Nevada
LUF	Luke Air Force Base, Nevada	Luke AFB, Nevada	102	33	33	0	112	22	0	Nevada	Nevada
MHV	Mojave Airport	Mojave	850	35	3	30	118	9	0	Kern	MDAB
MWS	Mount Wilson	Mount Wilson	1739	34	13	30	118	3	0	Los Angeles	SOCAB
MXL	Mexicali	Mexicali	7	32	37	33	115	13	25	Mexico	Mexico
MYF	Montgomery Field	San Diego	125	32	48	0	117	6	0	San Diego	SDAB
NFG	Oceanside Camp Pendleton	Oceanside	19	33	13	0	117	24	0	San Diego	SDAB
NID	China Lake Naval Warfare Center	China Lake	681	35	41	0	117	41	0	Kern	MDAB
NJK	El Centro	El Centro	14	32	49	0	115	40	0	Imperial	SSAB

NKX	Miramar National Weather Service Launch	Miramar Soledad Fwy	137	32	43	117	7	25	San Diego	SDAB
NLC	Lemoore	Lemoore	73	36	20	0	119	57	0	Kings
NRS	Imperial Beach	San Diego	8	32	34	0	117	7	0	San Diego
NSI	San Nicolas Island	San Nicolas Island	14	33	14	0	119	27	0	Ventura
NTD	Point Mugu NAS	Point Mugu	2	34	7	12	119	7	0	Ventura
NTK	Tustin MCAS	Tustin	5	33	42	0	117	49	48	Orange
NUC	San Clemente Island Airport	San Clemente	55	33	1	0	118	35	0	San Diego
NXP	29 Palms	29 Palms	581	34	7	48	115	56	36	San Bernardino
NYL	Yuma, Arizona	Yuma, Arizona	65	32	39	24	114	36	18	Arizona
NZJ	El Toro MCAB	El Toro	117	33	42	0	117	42	0	Orange
NZY	San Diego North Island	San Diego	15	32	43	0	117	12	0	San Diego
ONT	Ontario	Ontario	290	34	3	22	117	36	11	San Bernardino
OXR	Oxnard	Oxnard	13	34	12	0	119	12	0	Ventura
P38	Caliente, Nevada	Caliente, Nevada	1483	37	36	0	114	51	18	Nevada
P68	Eureka, Nevada	Eureka, Nevada	1815	39	36	0	116	0	18	Nevada
PHX	Phoenix	Phoenix	345	33	26	12	112	0	30	Arizona
PMD	Palmdale	Palmdale	774	34	38	0	118	5	0	Los Angeles
POC	La Verne Brackett Airport	La Verne	305	34	6	0	117	47	0	San Bernardino
PRB	Paso Robles	Paso Robles	255	35	40	24	120	37	36	San Luis Obispo
PRC	Prescott, Arizona	Prescott, Arizona	1537	34	39	6	112	25	12	Arizona
PSP	Palm Springs	Palm Springs	146	33	50	0	116	30	0	Riverside
PTV	Porterville	Porterville	135	36	1	48	119	3	42	Tulare
RAL	Riverside	Riverside	249	33	57	6	117	26	42	Riverside
RIV	March Air Force Base	Riverside	468	33	54	0	117	15	0	Riverside
ROSB	Santa Rosa Island B Met Site @ Elevation	Santa Rosa Island	396	33	59	20	120	5	43	Santa Barbara
SAN	San Diego	San Diego	5	32	44	0	117	11	12	San Diego
SBA	Santa Barbara	Santa Barbara	6	34	26	0	119	50	0	Santa Barbara
SDB	Sandberg	Sandberg	1379	34	45	0	118	44	0	Los Angeles
SDM	San Diego Brown Field	San Diego	160	32	34	18	116	58	48	San Diego
SEE	El Cajon Gillespie Airport	El Cajon	117	32	49	42	116	58	18	San Diego
SLI	Los Alamitos	Los Alamitos	9	33	48	0	118	7	0	Orange
SMO	Santa Monica	Santa Monica	53	34	0	54	118	27	0	Los Angeles
SNA	Santa Ana	Santa Ana	16	33	40	30	117	52	0	Orange
TIJ	Tijuana	Tijuana	46	32	32	4	116	57	2	Baja, Mexico
TOA	Torrance	Torrance	31	33	48	12	118	20	48	Los Angeles
										SoCAB

TPH	Tonopah, Nevada	Tonopah, Nevada	1654	38	3	36	117	5	12	Nevada	Nevada
TRM	Thermal	Thermal	-33	33	38	0	116	10	0	Riverside	SoCAB
TUS	Tuscon, Arizona	Tuscon, Arizona	805	32	7	0	110	56	30	Arizona	Arizona
U31	Austin, Nevada	Austin, Nevada	1747	39	28	6	117	11	42	Nevada	Nevada
VEG	VANDENBERG AFB	VANDENBERG AFB	34	34	45	0	120	34	12	Santa Barbara	SCCAB
VIS	Visalia	Visalia	89	36	19	6	119	23	30	Tulare	SJVAB
VNY	Van Nuys	Van Nuys	244	34	12	36	118	29	18	Los Angeles	SoCAB
WF	Lancaster	Lancaster	715	34	45	0	118	13	0	Los Angeles	MDAB
YUM	Yuma	Yuma	19	32	39	0	114	36	0	Arizona	Arizona

Table 3.2-9
NATIONAL PARKS SERVICE ROUTINE METEOROLOGICAL NETWORK

ID	Name	Address	City	(msl)	DD	MM	SS	DD	MM	SS	County	Air Basin
				Elev	Latitude			Longitude				
CHEES	CHEESEBORO			503	34	11	5	118	43	2	Los Angeles	SoCAB
DVNIM	Death Valley National Monument	DVNIM		38	36	30	32	116	50	52	Inyo	GBVAB
FCBH	Beverly Hills	Franklin Canyon	Los Angeles	59	34	6	14	118	24	28	Los Angeles	SoCAB
GCAZ	Grand Canyon	The Abyss-West Rim	Grand Canyon-Arizona	632	36	3	35	112	10	55	Arizona	Arizona
GCYC	Grand Canyon Visitor Center	Grand Canyon-Arizona	Grand Canyon-Arizona	646	36	3	17	112	7	15	Arizona	Arizona
HUNT	Hunter Mountain	Inyo		2098	36	33	45	117	28	25	Inyo	GBVAB
JOSH	Joshua Tree National Monument	Black Rock Canyon	Black Rock Canyon	1244	34	4	15	116	23	27	San Bernardino	MDAB
KCGG	Kings Canyon	Grant Grove Vill	Kings Canyon	613	36	44	13	118	57	25	Fresno	SJVAB
LCST	Lost Horse Mountain	Lost Horse Mountain		1280	34	1	4	116	11	16	Imperial	SSAB
RATT	Rattlesnake Creek	near Window Cliffs	Window Cliffs	2622	36	24	42	118	25	18	Tulare	SJVAB
SBAR	SANTA BARBARA	Santa Barbara	Santa Barbara	54	33	29	0	119	2	0	Santa Barbara	SCCAB
SCI\$	Santa Cruz Island	Santa Cruz Island	Santa Cruz Island	76	33	59	45	119	43	20	Santa Cruz	SCCAB
SCQAM	Sequoia National Park	Ash Mountain #1	Sequoia NP	186	36	29	38	118	49	44	Tulare	SJVAB
SCAS	Sequoia National Park	Ash Mountain #2	Sequoia NP	159	36	29	56	118	49	26	Tulare	SJVAB
SQGF	Sequoia National Park	Giant Forest	Sequoia NP	580	36	34	1	118	46	33	Tulare	SJVAB
SCNP	Sequoia National Park	Lower Kaweah	Sequoia NP	576	36	34	1	118	46	40	Tulare	SJVAB
SRIS	SANTA ROSA ISLAND	Santa Rosa Island	Santa Rosa Island	396	33	58	40	120	4	40	Santa Rosa	SCCAB
SUGA	Sugarloaf Mountain	Cedar Grove		2476	36	43	36	118	40	30	Fresno	SJVAB
YNCM	Yosemite National Park	Camp Mather	Yosemite NP	437	37	53	20	119	50	27	Mariposa	MCAB
YNTD	Yosemite National Park	Turtleback Dome	Yosemite NP	1605	37	42	46	119	42	14	Mariposa	MCAB
YNWV	Yosemite National Park	Wawona Valley	Yosemite NP	390	37	32	34	119	39	32	Mariposa	MCAB

YOSE	Yosemite Village	Park Headquarters	Yosemite NP	372	37	45	0	119	35	13	Mariposa	MCAB
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Table 3.2-10
UNITED STATES FOREST SERVICE ROUTINE METEOROLOGICAL NETWORK

ID	Name	Address	City	Site ID	(msl)	DD	MM	SS	DD	MM	SS	County	Air Basin
				Elev	Latitude								
APRT	ANGELES PORTABLE			323685B0	610	34	0	0	117	0	0	Los Angeles	SoCAB
BRMT	BRANCH MOUNTAIN			3247F476	1149	35	11	20	120	5	0	San Bernardino	MDAB
CHIL	Chilao Flat	Angeles National Forest	ANF	32486786	1662	34	20	0	118	2	0	Los Angeles	SoCAB
CMFS	CAMERON FIRE STATION		Cameron	326C332E	991	32	43	17	116	27	47	San Diego	SDAB
CONV	CONVERSE		Converse	3237D736	1712	34	11	1	116	55	1	San Bernardino	SoCAB
ELCR	EL CARISO		EI Cariso	3230A392	926	33	39	6	117	24	24	Riverside	SoCAB
FAWN	FAWNSKIN	North Side of Big Bear Lake		3230F3EE	2103	34	15	58	116	53	56	San Bernardino	SoCAB
GLEN	Glen Annie		Santa Barbara	3247F476	232	34	28	24	119	52	10	Santa Barbara	SCCAB
KEEN	Keenwild	Mountain Center near Baldy Mountain	Mountain Center	32675560	1500	33	42	47	116	42	48	Los Angeles	SoCAB
LPRT	LOS PRIETOS			3267907E	311	34	32	9	119	47	0	Santa Barbara	SCCAB
MILL	Mill Creek Summit		Los Angeles	3248416A	1070	34	23	0	118	4	0	Los Angeles	SoCAB
MONT	MONTECITO		Santa Barbara	3237E2AC	457	34	27	6	119	38	6	Santa Barbara	SCCAB
MTLG	MT LAGUNA		Fine Valley	326B6166	1756	32	52	47	116	25	13	San Diego	SDAB
OAKG	Oak Grove	On the Way to Temecula		32309608	839	33	23	36	116	47	42	San Diego	SDAB
ROSE	Rose Valley Falls	near Rancho Grande		3242A3CA	1016	34	32	35	119	11	3	Ventura	SCCAB
SNMC	San Marcos Pass		Santa Barbara	3247E700	671	34	30	45	119	49	23	Santa Barbara	SCCAB
TANB	Tanbark Creek	San Dimas Station		324837FA	793	34	10	0	117	46	0	Los Angeles	SoCAB
WARM	Warm Springs Mountain	Warm Springs Mountain	Castaic	3248521C	1226	34	35	0	118	33	0	Los Angeles	SoCAB

Table 3.2-11
UNITED STATES NAVY ROUTINE METEOROLOGICAL NETWORK

ID	Name	Address	City	(msl)	DD	MM	SS	DD	MM	SS	County	Air Basin
				Elev	Latitude							
HUEP	Port Hueneme		Oxnard	28	34	8	47	119	12	49	Ventura	SCCAB
LAGP	LAGUNA PEAK		Oxnard	134	34	6	31	119	3	55	Ventura	SCCAB
NSIN	San Nicolas Island		San Nicolas Island	9	33	15	36	119	34	20	Ventura	SCCAB
PMGU	POINT MUGU NAVAL AIR STATION		Point Mugu	1	34	6	36	119	7	12	Ventura	SCCAB
SCLH	San Clemente Island		San Clemente	592	32	52	33	118	25	57	San Diego	SDAB

SCRZ	Santa Cruz Island	Handar Station	Santa Cruz Island	450	33	59	43	119	38	6	Santa Cruz	SCCAB
SMIG	San Miguel Island	Handar Station	San Miguel	254	34	1	59	119	21	51	Santa Barbara	SCCAB

Table 3.2-12
UNITED STATES BUREAU OF LAND MANAGEMENT ROUTINE METEOROLOGICAL NETWORK

ID	Name	Address	City	Site	(msl)	DD	MM	SS	DD	MM	SS	County	Air Basin
			No.	Elev	Latitude								
BARA	Baragan Wash		Hyder, Arizona	327D53AC	148	32	58	3	113	26	58	Arizona	Arizona
BEAR	Bear Peak		Little Lake	32554592	2509	35	53	3	118	3	6	Inyo	GBVAB
BIG	Big End	Big End State Recreation Area	BESRA, Nevada	325CA03C	305	35	7	30	114	42	30	Nevada	Nevada
BKRK	Black Rock	Wolf Hole Mountain West, Arizona	Black Rock Spring	327BB090	2159	36	47	25	113	44	50	Arizona	Arizona
BORO	Boron		Boron	3277B10C	882	35	5	39	117	34	55	Kern	MDAB
BRKL	Black Rock Lookout	Paiute Wilderness Area, Arizona	PWA, Arizona	324E11D8	2204	36	47	40	113	45	3	Arizona	Arizona
BURN	Burns Canyon		Yucca Valley	325775FC	1829	34	12	30	116	37	15	Kern	MDAB
CALI	Caliente Range		Caliente Range	325472F2	1349	35	5	20	119	48	45	San Luis Obispo	SCCAB
CARR	Carrizo Canyon		Carrizo Canyon	325472Z2	759	35	5	47	119	46	22	San Luis Obispo	SCCAB
CHRI	Christmas Tree Pass		Christmas Tree Pass	325077C8	1052	35	16	13	114	46	58	Neveda	Nevada
DELO	DELONAGHA		Lake Isabella	010345A6	951	35	34	12	118	37	0	Kern	SJVAB
FISH	Fish Creek Mountain	U.S. Naval Reserve south of Saltan Sea	USNR	3277A27A	232	32	59	0	116	3	28	Imperial	SSAB
FVML	FIVE MILE			324E02AE	1265	35	52	18	117	55	6	Inyo	GBVAB
GOOD	Goodwin Mesa		Goodwin Mesa, AZ	324C62BC	1280	34	45	0	113	18	0	Arizona	Arizona
GRAN	Granite Mountain		Lucern Lake	325254D0	1439	34	32	8	117	1	33	Santa Barbara	SCCAB
HAVA	Havasu-Needles	Whipples Crossing Neary Hwy 40	Needles	3279B564	145	34	47	14	114	33	42	San Bernardino	MDAB
HORS	Horse Thief Springs	Near Tecopa	Tecopa	325185B6	1524	35	46	14	115	54	33	San Bernardino	MDAB
HURR	Hurricane		Hurricane, Arizona	327B66F8	1616	36	45	0	113	15	0	Arizona	Arizona
INDE	Independence		Independence	3254B7EC	1305	36	50	12	118	14	40	Inyo	GBVAB
JWBN	Jawbone		Emerald Mountain	32538042	1311	35	17	41	118	13	35	Kern	MDAB
LRLM	LAURAL MOUNTAIN		Ridgecrest	324DF524	1338	35	28	42	117	41	56	Kern	SJVAB
MID	Mid Hills		Mid Hills	3254C17C	1650	36	9	58	115	24	55	San Bernardino	MDAB
MOHA	Mojave Mountain		Mojave	327A774	1433	34	32	53	114	11	38	Kern	MDAB
MOJA	Mojave River Sink		Mojave	3277C79C	290	35	3	30	116	5	0	Kern	MDAB
MOSS	Moss Basin	near Kingman, Arizona	Kingman, Arizona	327D364A	1805	35	2	1	113	53	33	Arizona	Arizona
MOUN	Mount Logan	near Hurricane, Arizona	Hurricane, Arizona	324CA7A2	2195	36	20	50	113	11	56	Arizona	Arizona
MUSI	Music Mountain		Mohave, Arizona	3279J07A	1768	35	48	113	48	22	Mohave	Arizona	Arizona
NXFT	Nixon Flats Portab	Nixon Ranger Station	Trumbul & Tuweep, AZ	327C4220	1982	36	23	24	113	9	8	Arizona	Arizona

OLAF	Olaf Knolls Mountain			Olat Knolls Mtn, AZ	324C814E	884	36	30	0	113	49	0	Arizona	Arizona
OPAL	Opal Mountain			Opal Mountain	3257960E	988	35	9	20	117	11	0	San Bernardino	MDAB
PAHR	Pahrump, Nevada			Pahrump, Nevada	325CE834A	793	36	10	12	116	6	40	Nevada	Nevada
PANA	Panamint	near Death Valley National Monument	DVNIM		3277D4EA	2098	36	7	0	117	5	0	San Bernardino	MDAB
PICA	Picacho Wash	near Oregon		Obregon	3277E170	256	32	57	0	114	43	56	Imperial	SSAB
RED	Red Rock	Lincion Memorial Shrine		Relands	32516844	1146	36	8	7	115	25	38	San Bernardino	SoCAB
SMIT	Smith Peak	Harcuvar Mountains		Arizona	327D7540	762	34	6	57	113	20	50	Arizona	Arizona
SMRV	Santa Maria River	near Pultenita Ranch, Arizona		Pultenita Ranch, AZ	327AF160	427	34	17	25	113	21	35	Arizona	Arizona
SQLK	Squaw Lake	near Old Senator Mine		Old Senator Mine	327C34B0	91	32	54	30	114	29	40	Imperial	SSAB
SQUA	Squaw Springs Well	near Red Mountain		Red Mountain	3256429C	1104	35	22	0	117	34	5	Kern	SJVAB
STWH	Sacatone Wash	near Opal Mtn & not Bridge Cyn nor Spirit Mtn		Opal Mountain	324DD328	665	35	34	25	114	40	28	Clark	Nevada
TOQU	Toquop Wash			Toquop Gap, Nevada	32567706	746	36	55	24	114	11	56	Nevada	Nevada
TWEE	Tweeds Point			Tweeds Point	324C9238	1585	36	35	0	113	43	0	Arizona	Arizona
UNIO	Union Pass			Union Pass	3277246E	1073	35	13	48	114	22	57	Arizona	Arizona
WALK	Walker Pass			Walker Pass	3253B5D8	1699	35	39	53	118	3	25	Kern	SJVAB
YELL	Yellow John Mountain			Arizona	325FB444	1878	36	9	15	113	32	30	Arizona	Arizona

Table 3.2-13
CCOHD & MCOHD ROUTINE METEOROLOGICAL NETWORK

ID	Name	Address	City	Site (msi)	DD	MM	SS	DD	MM	SS	County	Air Basin	
				No.	Elev								
						Latitude							
BKJT	Henderson	Burkhholder Junior High School	Last Hills	3203030005	594	36	1	51	115	8	38	Kern	MDAB
GLDL	Glendale	6000 West Olive	Glendale	40132001	357	33	34	8	112	11	23	Los Angeles	SoCAB
HDLM	Henderson	545 Lake Mead Drive	Henderson	3203030007	579	36	1	44	114	59	20	Nevada	Nevada
LTFD	Litchfield Park		Glendale	40130009	325	33	27	21	112	21	28	Los Angeles	SoCAB
LVAP	Las Vegas	McCarren Airport	Las Vegas	320031007	668	36	4	40	115	10	4	Nevada	Nevada
LVCC	Las Vegas	City Center	Las Vegas	320030016	0	36	10	26	115	8	5	Nevada	Nevada
LVCH	Las Vegas	2850 E. Charleston Blvd	Las Vegas	320030557	567	36	9	32	115	6	35	Nevada	Nevada
LVEB	Las Vegas	280 E. Bonanza	Las Vegas	320031001	627	36	10	26	115	8	27	Nevada	Nevada
LVEC	Las Vegas	2801 E. Charleston Blvd	Las Vegas	320030010	567	36	9	32	115	6	35	Nevada	Nevada
LVES	Las Vegas	E. Sahara	Las Vegas	320030556	616	36	8	52	115	8	38	Nevada	Nevada
LVMS	Las Vegas	4701 Mitchell Street	Las Vegas	320030020	1922	36	14	41	115	5	31	Nevada	Nevada
LVSL	Las Vegas	625 Shadow Lane	Las Vegas	320030009	632	36	9	50	115	9	46	Nevada	Nevada
LVSR	Las Vegas	680 Sunset Road	Las Vegas	320031005	645	36	4	22	115	8	52	Nevada	Nevada
LVWW	Las Vegas	5483 Clubhouse Drive	Las Vegas	320030338	521	36	8	34	115	3	7	Nevada	Nevada

PENX	Phoenix	4202 Bellview	Phoenix	40130018	326	33	27	43	112	8	56	Arizona
PH19	Phoenix	McDowell Road & 19th Avenue	Phoenix	40131008	330	33	27	54	112	5	56	Arizona
PH47	Phoenix	47th Avenue & Osborn Road	Phoenix	40131006	348	33	30	39	112	7	47	Arizona
PHAP	Phoenix	Sky Harbor Airport	Phoenix	40131007	339	33	25	44	112	1	4	Arizona
PHER	Phoenix	1845 E. Roosevelt	Phoenix	40133002	340	33	27	32	112	2	34	Arizona
PHFF	Phoenix	Falcon Field	Phoenix	40131010	0	33	27	17	112	4	22	Arizona
PHIX	Phoenix	11740 W. Adams Street	Phoenix	40130014	327	33	26	56	112	5	49	Arizona
PHN6	Phoenix	8521 N. 6th Street	Phoenix	40131004	379	33	33	39	112	3	53	Arizona
PHWC	Phoenix	30 West Corona Avenue	Phoenix	40131005	328	33	24	21	112	2	27	Arizona
PHWE	Phoenix	3847 W. Earl	Phoenix	40130019	324	33	29	2	112	8	31	Arizona
PNX	Phoenix	4732 S. Central	Phoenix	40130013	328	33	24	17	112	4	22	Arizona
POEX	Phoenix	3315 W. Indian School	Phoenix	40130016	341	33	29	38	112	7	47	Arizona
SUNC	Sun City	Thunderbird & Del Web	Sun City	40138001	358	33	38	13	112	17	31	Arizona

Table 3.2-14
RAWS ROUTINE METEOROLOGICAL NETWORK

ID	Name	Address	City	Site No.	(msl) DD	MM	SS	DD	MM	SS	County	Air Basin
ACTN	Acton	Mountains South West of Acton	Acton	CA4A7044	792	34	26	45	118	12	0	Los Angeles
AGRN	Arroyo Grande	Arroyo Grande near Lopez Lake	Arroyo Grande	CA2384AE	187	35	11	31	120	25	54	San Luis Obispo
ANZA	Anza	Anza	Anza	CA44C7A2	1195	33	33	18	116	40	23	Riverside
BELL	Bell Canyon	North East of San Juan Capistrano		CA4A93B6	213	33	32	30	117	35	30	Orange
BHL	Beverly Hills	Franklin Canyon-Franklin Reservoir	Franklin Canyon	CA41EE8E	384	34	7	30	118	24	44	Los Angeles
CASE	Case Springs	Between San Clemente and Temecula		92002544	707	33	26	43	117	25	5	San Diego
CMP9	CAMP 9			CA41A584	1219							SDAB
CMP1	CMP TARGET RANGE			920010DE	280	33	22	20	117	21	32	San Diego
DEVO	Devore	Near Crestline - West South West		CA44F238	634	34	13	16	117	24	11	San Bernardino
FSPR	Fountain Springs	Near Terra Bella		CA229522	64	35	53	32	118	54	54	Tulare
JULI	Julian	Julian	Julian	CA44A5DE	1292	33	4	33	116	35	27	San Diego
LAPZ	La Panza	Los Padres National Forest	Panza Range	CA2397D8	497	35	22	52	120	11	15	San Luis Obispo
LTAB	Las Tablas	Near Nacimiento Reservoir		CA23742A	497	35	39	20	120	55	22	SDAB
MHIL	Malibu Hills	Malibu	Malibu	CA44A73EC	480	34	3	30	118	38	0	Los Angeles
PFLD	Parkfield	Parkfield		CA2352C6	468	35	53	56	120	25	55	NCCAB
POTR	Potrero	Near Mexican Border Between El Cajon & Pine Valley		CA4535DC	32	36	22	116	36	29	29	Monterey
RANC	Ranchita	Near Borrego Springs	Borrego Springs	CA4526AA	1274	33	12	44	116	30	19	SDAB
ROSP	Santa Rosa Plateau	Near Murrieta Hot Springs		CA446332	604	33	31	43	117	13	50	Riverside

SFDM	Santa Fe Dam	South West of Azusa and North East of Irwingdale	CA4A80C0	152	34	7	15	117	56	45	Los Angeles	SocAB
SGUS	Saugus	Santa Clarita	CA418368	442	34	25	30	118	31	30	Los Angeles	SocAB
SRPL	SANTA ROSA PLATEAU	South West of Murrieta Hot Springs	CA446332	604	33	31	43	117	13	50	San Diego	SDAB
TARG	CMP Target Range	Near Fallbrook	920010DE	280	33	22	20	117	21	32	San Diego	SDAB
UHL	UHL	North West of Kernville just inside the Tulare County	323142DA	1134	35	48	0	118	36	0	Tulare	SJVAB
VLYC	Valley Center	Valley Center	CA451330	418	33	13	34	116	59	32	San Diego	SDAB
YCAV	Yucca Valley	Yucca Valley	CA450046	994	34	7	24	116	24	28	Riverside	SSAB

3.3 Supplemental Air Quality and Meteorological Measurements

- The brief review of supplemental measurements during SCOS97-NARSTO provided here will allow data analysts and modelers to know what additional air quality and meteorological parameters were measured at each station. As noted before, there is significant overlap between supplemental ozone, aerosol, and NO_x stations. To give a comprehensive overview, supplemental sites and parameters measured at each site are provided in Table 1.

Table 1 gaesous measurement columns are: ozone, nitrogen oxide, nitrogen dioxide, total reactive nitrogen, peroxy acetyl and peroxy propionyl nitrates, perchloro ethylene, methyl chloroform, nitric acid, nitrate ion, ammonia, carbon monoxide (CO), total hydrocarbons, methane (CH₄), non-methane hydrocarbons, CO-CH₄-carbon dioxide, speciated hydrocarbons with two to eleven carbon atoms, methyl tert-butyl ether, carbonyls, multi-functional oxygenated hydrocarbons, biogenic hydrocarbons [isoprene and terpenes], halocarbons, total reactive carbons, polycyclic aromatic hydrocarbons, fraction of radioactive carbon [fossil vs. newly fixed], and free radicals [OH, O₂H, O₂R]. Each measurement entry has detailed information that cannot be presented here. This table is meant to provide a guide to focus and to direct data analysts' and modelers' inquiries. The particulate matter columns are: aerodynamic diameter size 10 and 2.5 microns and all sizes. Please note that there is a wealth of important detailed information from the aerosol program available in section 3.6 of this volume. The radiation columns are: total solar radiation, light scattering, light absorption, ultra violet radiation, NO₂ dissociation light, and relative ultra violet radiation. More detail can be obtained from individual investigators at their world wide web sites or through reports when they are available for public dissemination. An explanation of instrument codes is provided at the end of Table 1.

The sites in *Italic* were aerosol sites that operated for only several weeks. It is important to note that Table 1 information on the aerosol program is only intended to provide those interested in particulate matter issues a better understanding of the generalities of SCOS97-NARSTO. Existing instruments are highlighted in Table 1.

Nitric acid measurements by the Tunable Diode Laser Spectroscopy (TDLAS) were unique to the Azusa station. The carbonyl intercomparison took place at the Azusa station. The EPA continuous gas-chromatography and the radio carbon group conducted their measurements at Azusa. Multi-functional carbonyls and total reactive carbon measurements are also unique to Azusa. The SCAQMD Azusa station can be considered the SCOS97-NARSTO supersite.

The supplemental meteorological measurements were added either to existing stations or were added to supplemental ozone, NO_x, and aerosol network sites. These measurements are neither part of the Routine Network nor include other existing meteorological data resources. These measurements do not include surface meteorological measurements that accompany aloft stations such as radar wind profiler and radio acoustic sounding systems or sound detection and ranging instruments. Please note that there are many ways to

describe wind speed and direction; Table 2 just notes availability of wind data in general. Please also note that the meteorological data from these stations have received more stringent quality assurance than is usually the case with similar data from the Routine Network. Table 2 is intended to provide a directory of quality determined surface meteorological data for analysts and modelers.

These two tables, the SCOS97-NARSTO Atlas and the data management guidelines communicated to investigators and study participants provide the best starting point for analysis and modeling of ozone and aerosol episodes.

Table 3.3-1
SUPPLEMENTAL AIR QUALITY MEASUREMENTS

SITE	Data Source	PARAMETERS																			Aerosols	Radiation	
		ID	Principal	O ₃	NO	NO _x	PPN	PER	MCL	HNO ₃	IND _x	NH ₃	CO	THC	CH ₄	MHMHC	CO-CO ₂	C ₂₋₁₁	MTBE	GRB	MGRB	BIO	
29PM	US Marines	Helgeson, N	DAS	T42	T42	TCY										CH ₄	CAN	CAN	CAN			PM	PM
ALPN	ARB-CHS	Stover, Cindy	DAS	CHM	CHM																	10	2.5
ALPN	SDAAPCD	Hossain, M	DAS	TCY																		TOM	2-WK
ALPN	SDAAPCD	Hossain, M	DAS	TCY																		DNP	
ANAH	DRI	Zellista, B	DAS	T42	T42																		
ARCO	CE-CERT	Fitz, Dennis	DAS																				
ATAS	ARB-CHS	Stover, Cindy	DAS	CHM	CHM																		
AZSA	CE-CERT	Fitz, Dennis																					
AZSA	CE-CERT	Fitz, Dennis	TDS																				
AZSA	CE-CERT	Fitz, Dennis	DAS	T42	T42	TCY																	
AZSA	CE-CERT	Fitz, Dennis	DAS	T42	T42	TCY																	
AZSA	DGA	Grosjean, D																					
AZSA	EPA	Lewis																					
AZSA	EPA	McClenny																					
AZSA	SCAQMD	Barbos, S																					
AZSA	UC Davis	Charles, J																					
AZSA	UCLA	Prafton, S																					
AZSA	UCRiverside	Arey, Janet																					
AZSA	UCRiverside	Arey, Janet																					
AZSA	UCRiverside	Arey, Janet																					
AZSP	Cal Tech	Cesa, Glen																					
AZSP	UCRiverside	Prather, Kim																					
BANN	CE-CERT	Fitz, Dennis	DAS	T42	T42	TCY																	
BANN	UCRiverside	Arey, Janet																					
BANN	UCRiverside	Arey, Janet																					
BARS	MDAQMD	Ramirez, B																					
BARS	MDAQMD	Ramirez, B	DAS	T42	T42	TCY																	
BARS	MDAQMD	Ramirez, B																					

SITE	Data Source	PARAMETERS														Aerosols																					
		Gases ^a				Radiation																															
ID	ID	Principal	O ₃	NO	NO _x	PAN	PPN	PER	MCL	HNO _x	NO _x	NH ₃	C ₂ O	THC	CH ₄	NMHC	CO-CO ₂	C ₂ H ₆	MTBE	TCRB	MCRB	BIO	HALC	TRC	PAH	RCB	OH	PM	PM	TSR	BSP	BAP	UVS	JNO	RUV		
BLKM	SDCAPCD	Hossein, M.	DAS																																		
BRBK	DRI	Ziefferska, B	DAS	T42	T42																																
BRBK	SCAQMD	Barbosa, S	DAS	T42	T42																																
CAJB	AeroVironim	Pankratz, D	DAS	TAY	LPA	TAY	LPA																														
CAJC	MDAQMD	Ramirez, B	DAS	T42	T42																																
CALB	AeroVironim	Pankratz, D	DAS	TAY	LPA	TAY	LPA																														
CATA	AeroVironim	Pankratz, D	DAS	TAY	LPA	TAY	LPA																														
CATT	AeroVironim	Pankratz, D	DAS																																		
CHIM	CE-CERT	Fitz, Dennis	DAS	MNL	MNL	TCY																															
CHIM	CE-CERT	Tuzon, E																																			
CHIN	Ca Tech	Cass, Glen																																			
CHIN	Ca Tech	Cass, Glen																																			
CHIN	UCRiverside	Prather, Kim																																			
CHIN	ARB-CHS	Stover, Cindy	DAS	CHW	CHW																																
CLMS	SDCAPCD	Hossein, M.	DAS																																		
DIAM	CE-CERT	Fitz, Dennis	DAS	MNL	MNL	TSY																															
DIAM	Ca Tech	Cass, Glen																																			
DIAM	UCRiverside	Prather, Kim																																			
EMAP	CE-CERT	Fitz, Dennis	DAS																																		
ESCO	SDCAPCD	Hossein, M.	DAS																																		
GUDR	ARB-CHS	Stover, Cindy	DAS	CHW	CHW																																
HAWH	SCAQMD	Barbosa, S	DAS	T42	T42																																
KRNW	SDCAPCD	Hossein, M.	DAS	T42	T42																																
LAGP	US Navy	Henry, R	DAS																																		
LANC	ARB-CHS	Stover, Cindy	DAS	CHW	CHW																																
LANC	MDAQMD	Ramirez, B	DAS	T42	T42																																
LANM	CE-CERT	Fitz, Dennis	DAS	T42	T42	TAY																															
LANM	CE-CERT	Fitz, Dennis																																			
LANM	Ca Tech	Cass, Glen																																			
LANM	UCRiverside	Any, Janet																																			

SITE	Data Source	PARAMETERS																																		
		ID	ID	Principal	O ₃	NO	NO _x	PAN	PPN	PER	MCL	HNO ₃	NO _x	NH ₃	CO	THC	CH ₄	INMHC	CO-CO ₂	C _{x,y}	MTBE	CRB	MCRB	BIO	HALC	TRC	PAH	RCB	OH	PM	PM	PM	TSR	BSP	UVS	JNO
LANN	UCRiverside	Prather, Kim																																		
LELS	ARB-CHS	Stover, Cindy	DAS	CHM	CHM																															
LKAR	ARB-CHS	Stover, Cindy	DAS	CHM	CHM																													TMS		
LOMP	ARB-CHS	Stover, Cindy	DAS	CHM	CHM																													TOM 2-WK		
MIBLD	ARB-CHS	Schreiber, K	DAS	T42	T42																													TOM 2-WK		
MIBLD	UCRiverside	Arey, Janet	NIR																																	
MEXI	DRI	Zelinska, B	DAS	T42	T42																															
NLGB	ARB-CHS	Stover, Cindy	DAS	CHM	CHM																															
OJAF	UCLA	Karlik, John	DAS	CHM	CHM																															
PEND	SDCAPCD	Hossain, M	DAS	T42	T42																															
PICO	SCAQMD	Bartosik, S	DAS	T42	T42																															
PINE	EPA	Lewis	DAS	T42	T42																															
PINE	UCRiverside	Arey, Janet	NIR	FID	GSC																															
PNGU	US Navy	Hely, R	DAS	T42	T42																															
PTCL	DRI	Zelinska, B	DAS	T42	T42																															
PVSIP	Aer/Intron	Frankritz, D	DAS																																	
REDM	SDCAPCD	Hossain, M	DAS																																	
RICE	Port State	OBrien, Bob	DAS	T42	T42																															
RIPR	Aerodol Dyn	Herring, S																																		
RIPR	Aerodol Dyn	Herring, S																																		
RIRD	CE-CERT	Fitz, Dennis																																		
RIRD	CE-CERT	Fitz, Dennis																																		
RIRD	CE-CERT	Fitz, Dennis																																		
RVC	CalTech	Cass, Glen																																		
RVC	UCRiverside	Prather, Kim																																		
ROSA	SECAPCD	Murphy, T	DAS																																	
SHPK	SDCAPCD	Hossain, M	DAS																																	
SMSB	ARB-CHS	Stover, Cindy	DAS																																	
SNDW	ARB-CHS	Stover, Cindy	DAS	CHM	CHM																															
SNIC	CE-CERT	Fitz, Dennis	DAS	TSY	TSY																															

SITE	Data Source	PARAMETERS																																
		Gases						Aerosols						Radiation																				
ID	Principal	O ₃	NO	NO _x	PAN	PFN	PFR	MCL	HNO _x	NO _x	CO	THC	CH ₄	NMMHC	CO-CO ₂	C _{x-y}	MTBE	CRB	MCRB	BIO	HALC	TRC	PAH	RCB	OH	PM	PM	PM	TSR	BSP	BAP	UVS	JNO	RUV
SNIC	DRI	Zelinska, B																																
SOLM	SDCAPCD	Hossain, M	DAS	T42	T42	TCY																												
SOLM	SDCAPCD	Hossain, M																																
SVAL	CE-CERT	Fitz, Dennis	DAS	T42	T42	TCY																												
SVAL	DGA	Grosjean, D																																
TCDC	SCAQMD	Barboza, S	DAS																															
TEHP	CE-CERT	Fitz, Dennis	DAS																															
TIRP	DRI	Zelinska, B	DAS	T42	T42																													
UCDC	ARE-CHS	Stover, Cindy	DAS	CHM	CHM																													
UCDC	CE-CERT	Fitz, Dennis	DAS	T42	T42																													
UCDC	CE-CERT	Fitz, Dennis	DAS	T42	T42	TCY																												
UCDC	UCRiverside	Arey, Janet																																
UCDC	UCRiverside	Arey, Janet																																
ULDS	ARE-BHS	Stover, Cindy	DAS	CHM	CHM																													
VGEN	SDCAPCD	Hossain, M	DAS																															
WILS	CE-CERT	Fitz, Dennis	DAS																															
WILS	CE-CERT	Fitz, Dennis	DAS																															
WILS	CE-CERT	Fitz, Dennis	DAS																															
WSPR	SDCAPCD	Hossain, M	DAS																															

METHOD	Method Description	2-Week	Two Week Filter Pack Sampler	DNP	DNP/HPLC-LV	GCE	Gas Chromatography-ECD	NIR	Non Dispersive Infra Red	SFD	Stack Filter Diff Demuder	TDLAS
ATH	Aethiometers	BRW	Brewer 260 to 320 & 420-510 nm	EPP	Empley	GCM	Continuous GC & MS	NPH	Nephelometer	SPU	Stack Filteration Unit-Nucleopore	TEN
CHM	Chemiluminescence	CTF	Cold Trap & FID	FID	Continuous FID	IMS	PFBA/Ion trap MS	NTO	NO ₃ plus PAH Reaction Products	SIR	Intra Red Spectroscopy	TOM
			Laser Fluorescence	FTIR	FTIR	LIC	Licor 300 to 850 nm	T42	Theco 42 or API Chem Illuminesc	TMS	Tapered Element Oscillating Membrane	
				FLT	Filter Pack	LIF	Hi-vol & PUF plugs	T4S	Theco 42 Chem Illuminesc	TRN	Time of Flight Mass Spectrometer	
				FRM	Federal References Method	LPA-4	Luminox	TAY	Theco 42 converted Chem Illumin	TSY	Transducer	
				GCC	Continuous GC	MNL	Monitor Labz Chem Illuminesc	TCY	Theco 42 CY Chem Illuminesc		Theco 42S converted Chem Illumin	

Table 3.3-2
SUPPLEMENTAL SURFACE METEOROLOGICAL MEASUREMENTS

SITE	Data Source		PARAMETERS				
	ID	Principal	TMP	RH	DEW	WS	WD
BANN	CE-CERT	Fitz, Dennis	✓	✓			
BARS	MDAQMD	Ramirez, B	✓	✓	✓	✓	
BLKM	SDCAPCD	Hossain, M	✓		✓	✓	
CAJB	AeroVironm	Pankratz, D	✓		✓	✓	
CAJC	MDAQMD	Ramirez, B	✓		✓	✓	
CALB	AeroVironm	Pankratz, D	✓		✓	✓	✓
CATA	AeroVironm	Pankratz, D	✓	✓	✓	✓	
CATI	AeroVironm	Pankratz, D	✓	✓	✓	✓	
CHIN	CE-CERT	Fitz, Dennis	✓	✓			
CLMS	SDCAPCD	Hossain, M	✓		✓	✓	
DIAM	CE-CERT	Fitz, Dennis	✓	✓			
LAGP	US Navy	Helvy, R	✓		✓	✓	
LANC	ARB-CHS	Stover, Cindy	✓	✓			
LELS	ARB-CHS	Stover, Cindy	✓	✓			
LKAR	ARB-CHS	Stover, Cindy	✓	✓			
LOMP	ARB-CHS	Stover, Cindy	✓	✓			
MBLD	ARB	Schreiber, K	✓	✓	✓	✓	
PEND	SDCAPCD	Hossain, M	✓		✓	✓	
PMGU	US Navy	Helvy, R	✓		✓	✓	
PTCL	SBCAPCD	Murphy, T	✓		✓	✓	
PVSP	AeroVironm	Pankratz, D	✓		✓	✓	
REDM	SDCAPCD	Hossain, M	✓		✓	✓	
RIRD	Port State	O'Brien, Bob	✓	✓	✓	✓	
RIVC	CE-CERT	Fitz, Dennis	✓	✓			
SMPK	SDCAPCD	Hossain, M	✓		✓	✓	
SNIC	CE-CERT	Fitz, Dennis	✓		✓	✓	
SOLM	SDCAPCD	Hossain, M	✓	✓	✓	✓	
TEHP	CE-CERT	Fitz, Dennis	✓	✓	✓	✓	
TEMC	SCAQMD	Barbosa, S	✓		✓	✓	
UCDC	CE-CERT	Fitz, Dennis	✓	✓			
VCEN	SDCAPCD	Hossain, M	✓		✓	✓	
WILS	CE-CERT	Fitz, Dennis	✓	✓	✓	✓	
WSPR	SDCAPCD	Hossain, M	✓		✓	✓	